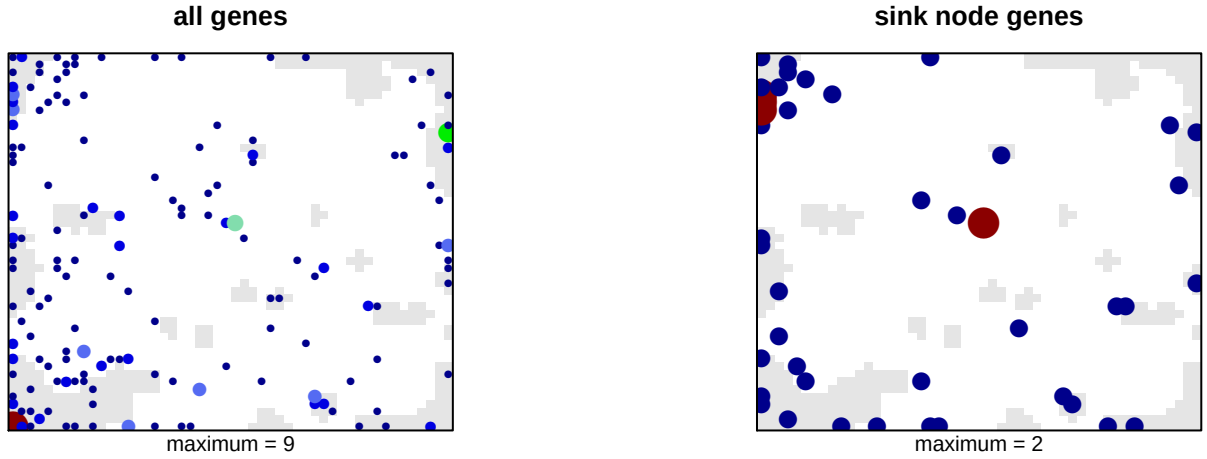
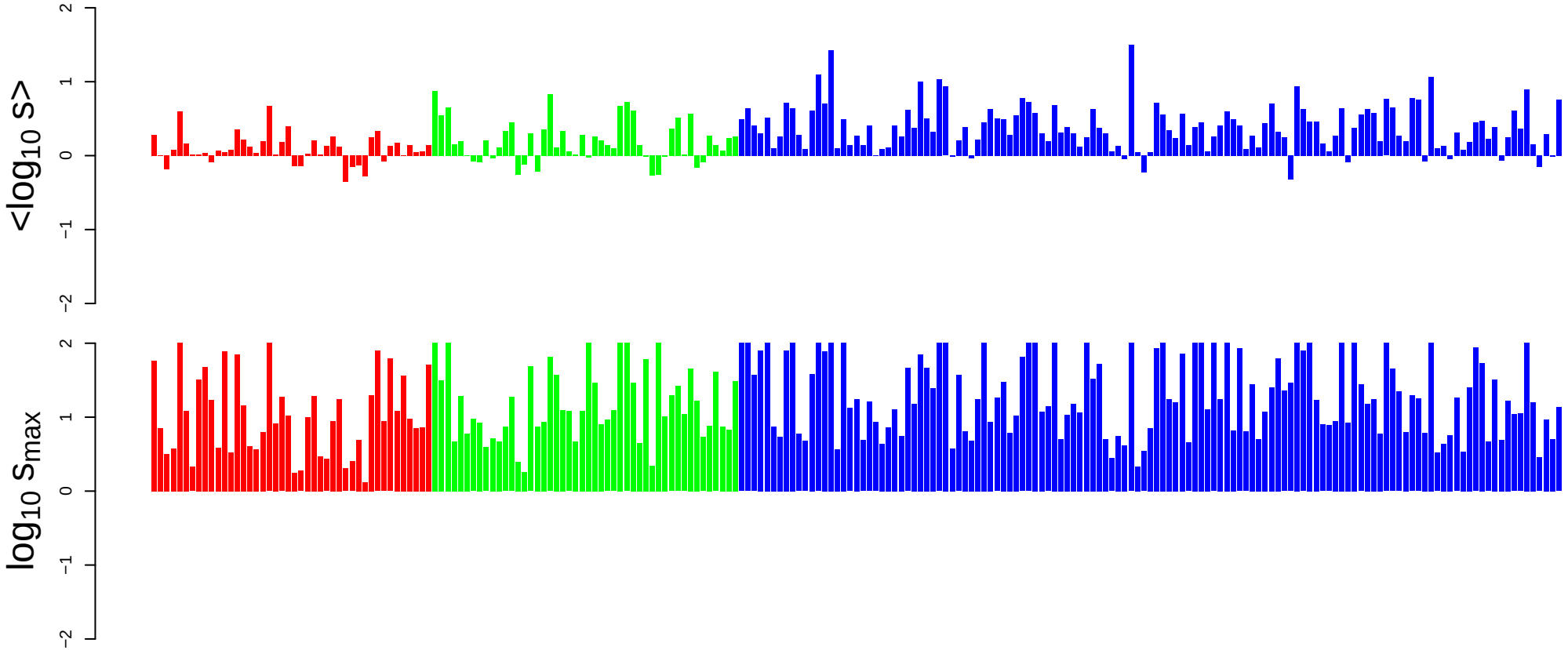
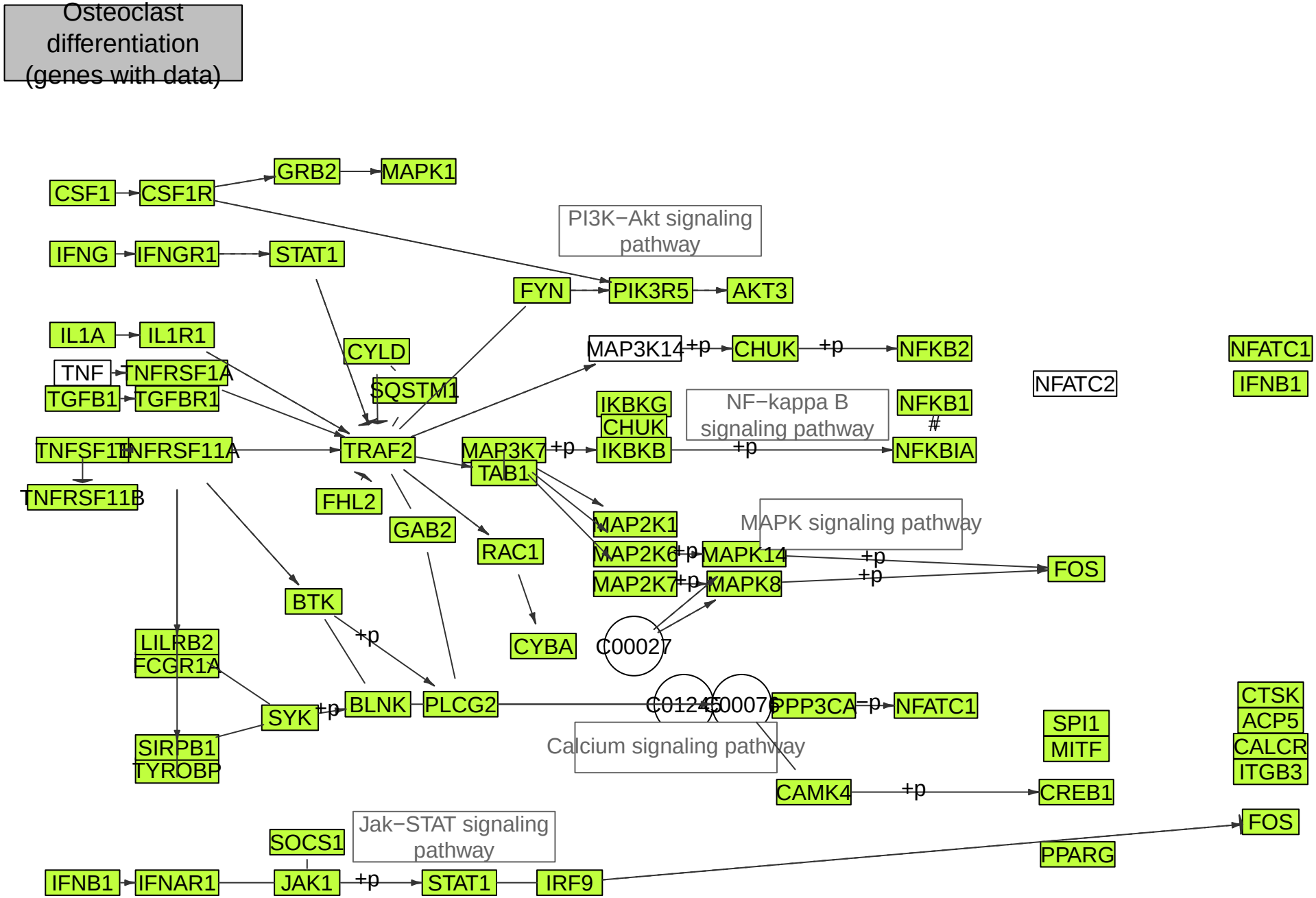
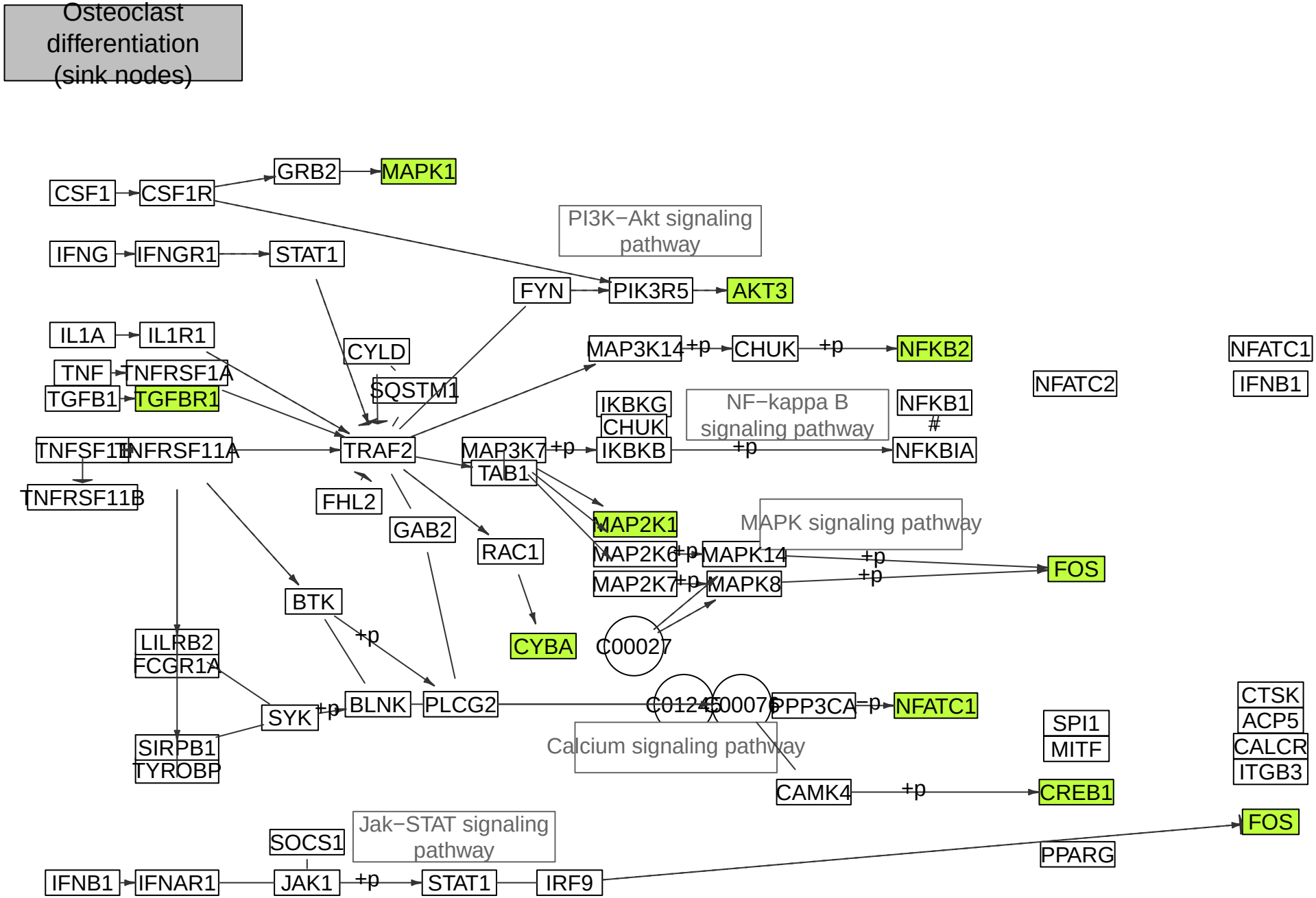
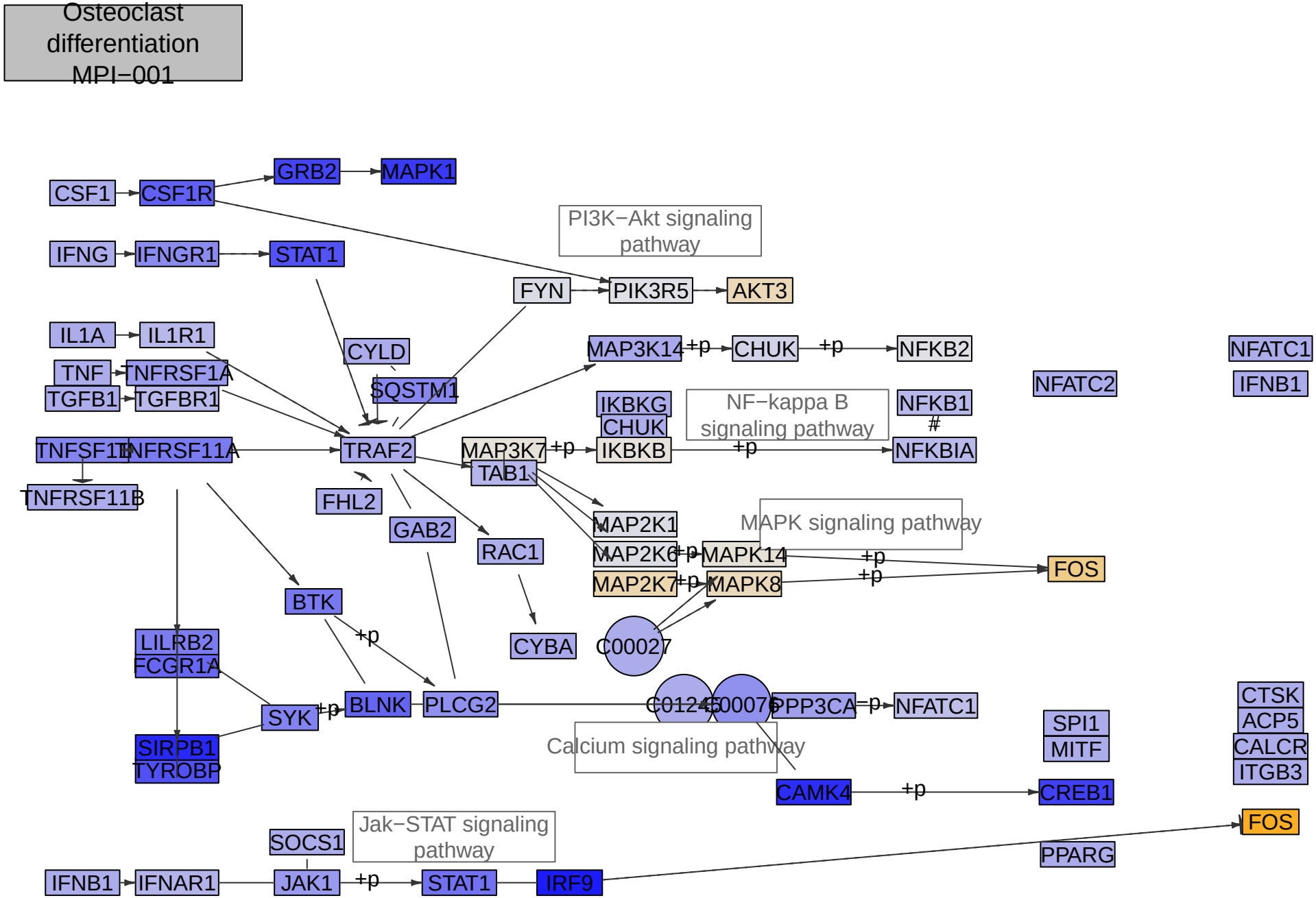
Osteoclast differentiation

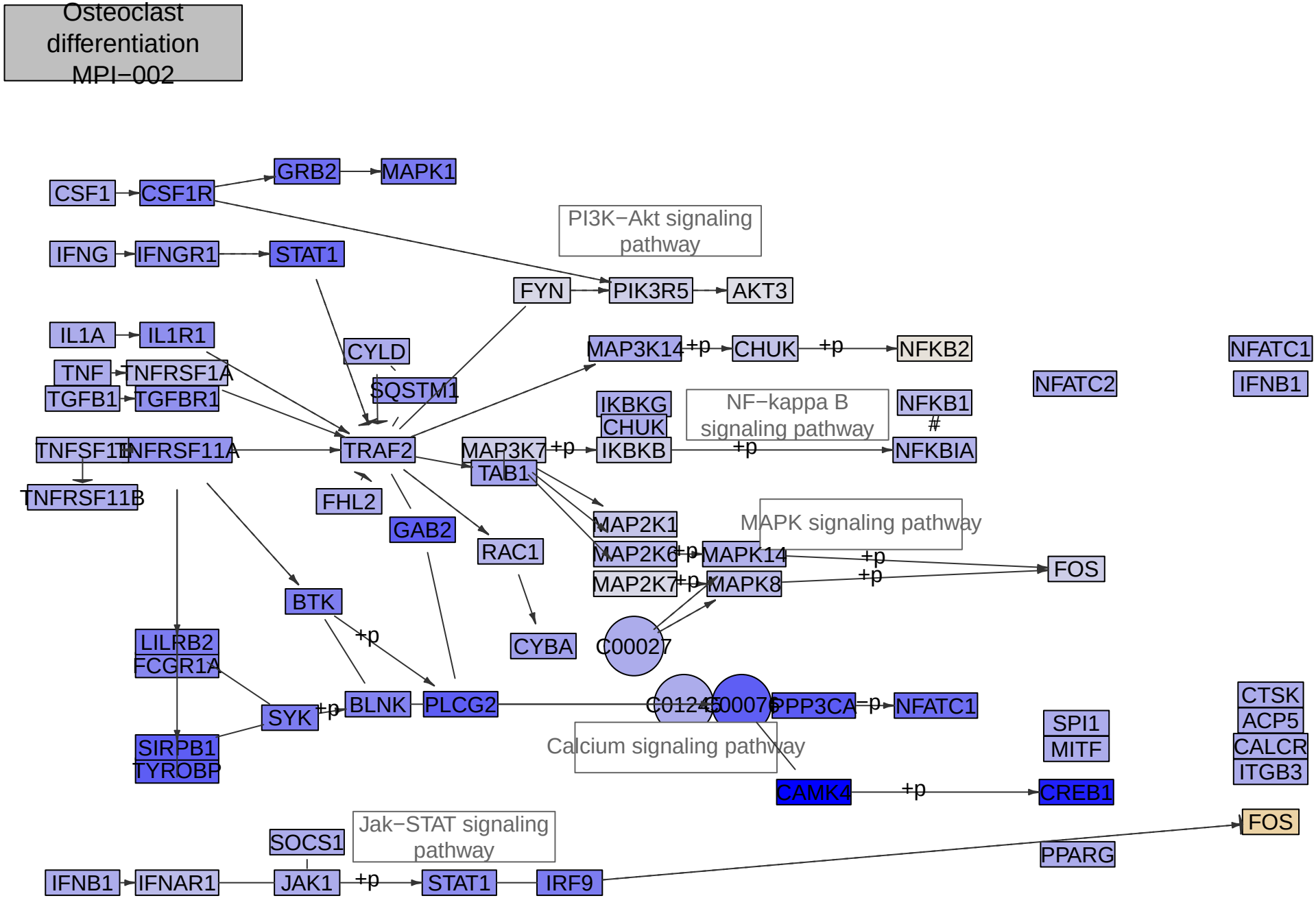


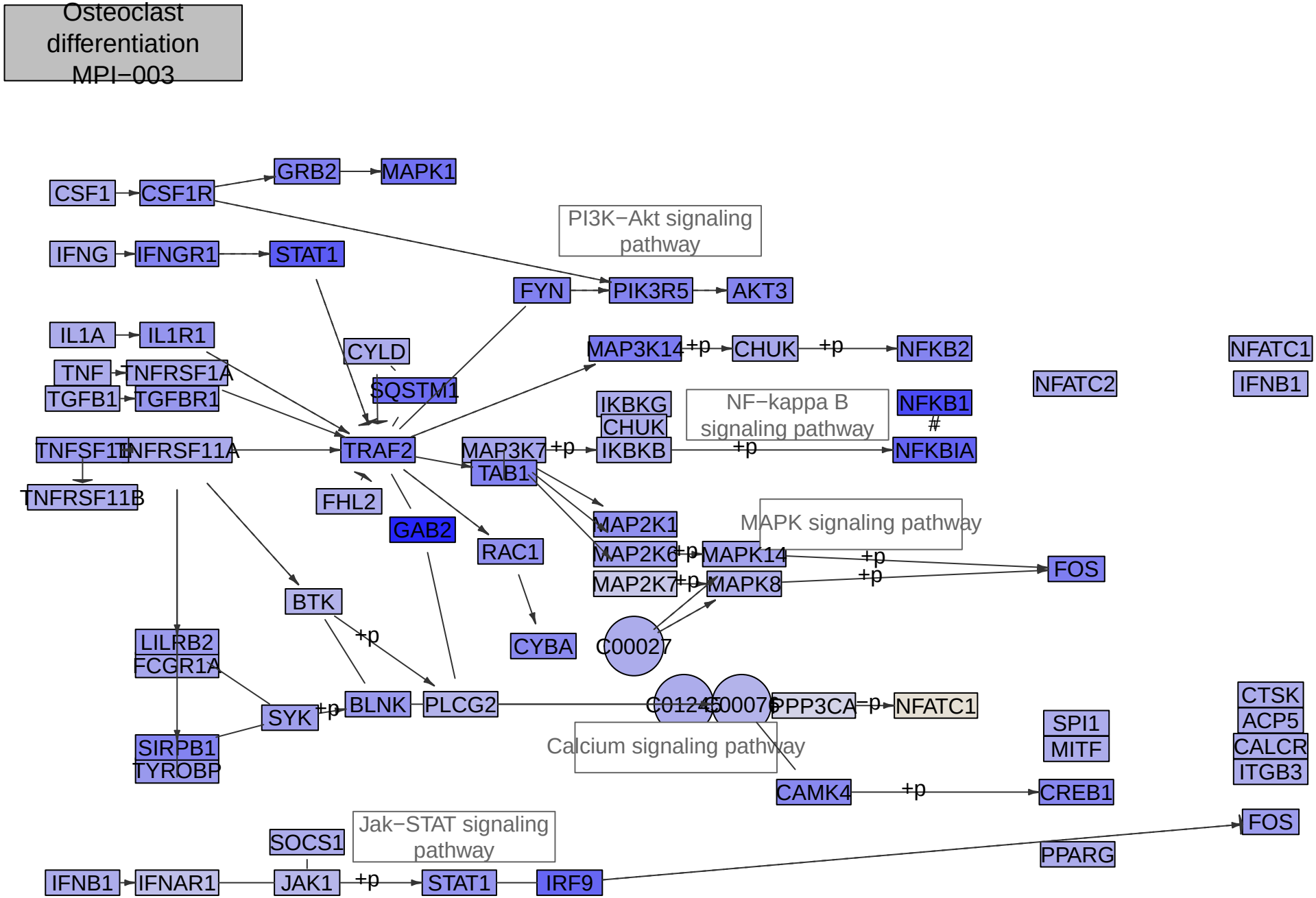


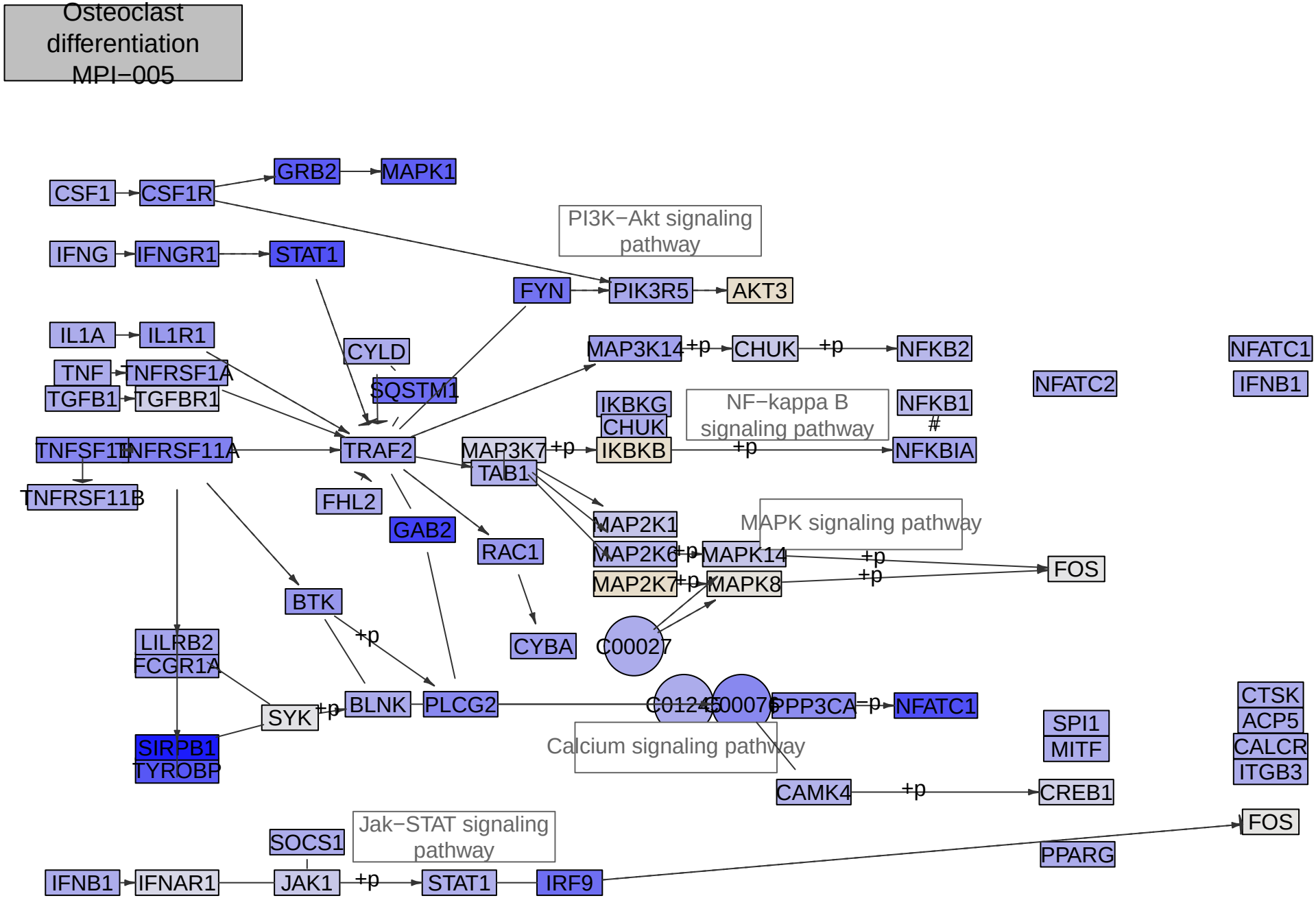

Osteoclast differentiation (genes with data)
CSF1
CSF1R
GRB2
MAPK1
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
=p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9

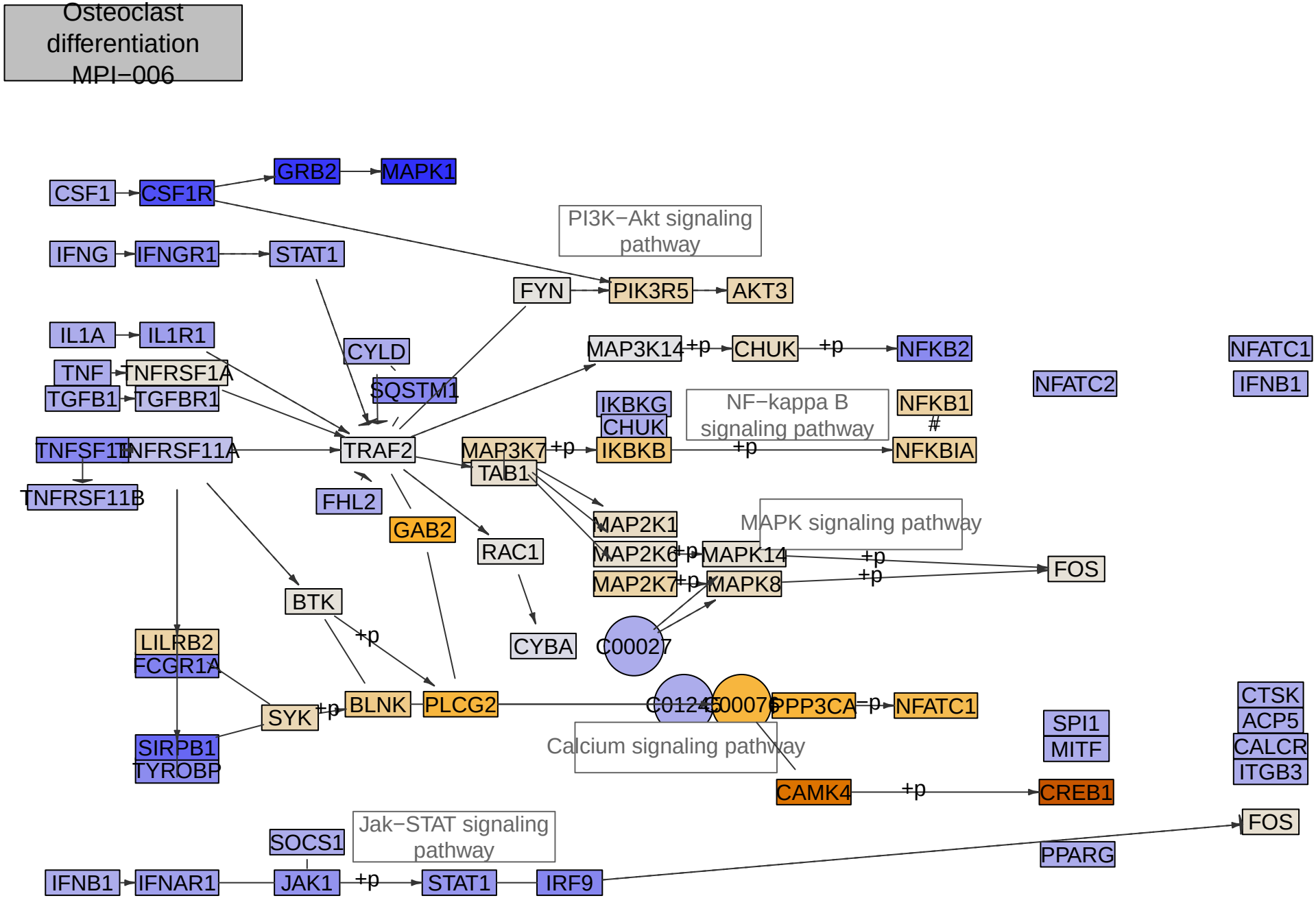

Osteoclast differentiation (sink nodes)
CSF1
CSF1R
GRB2
MAPK1
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9

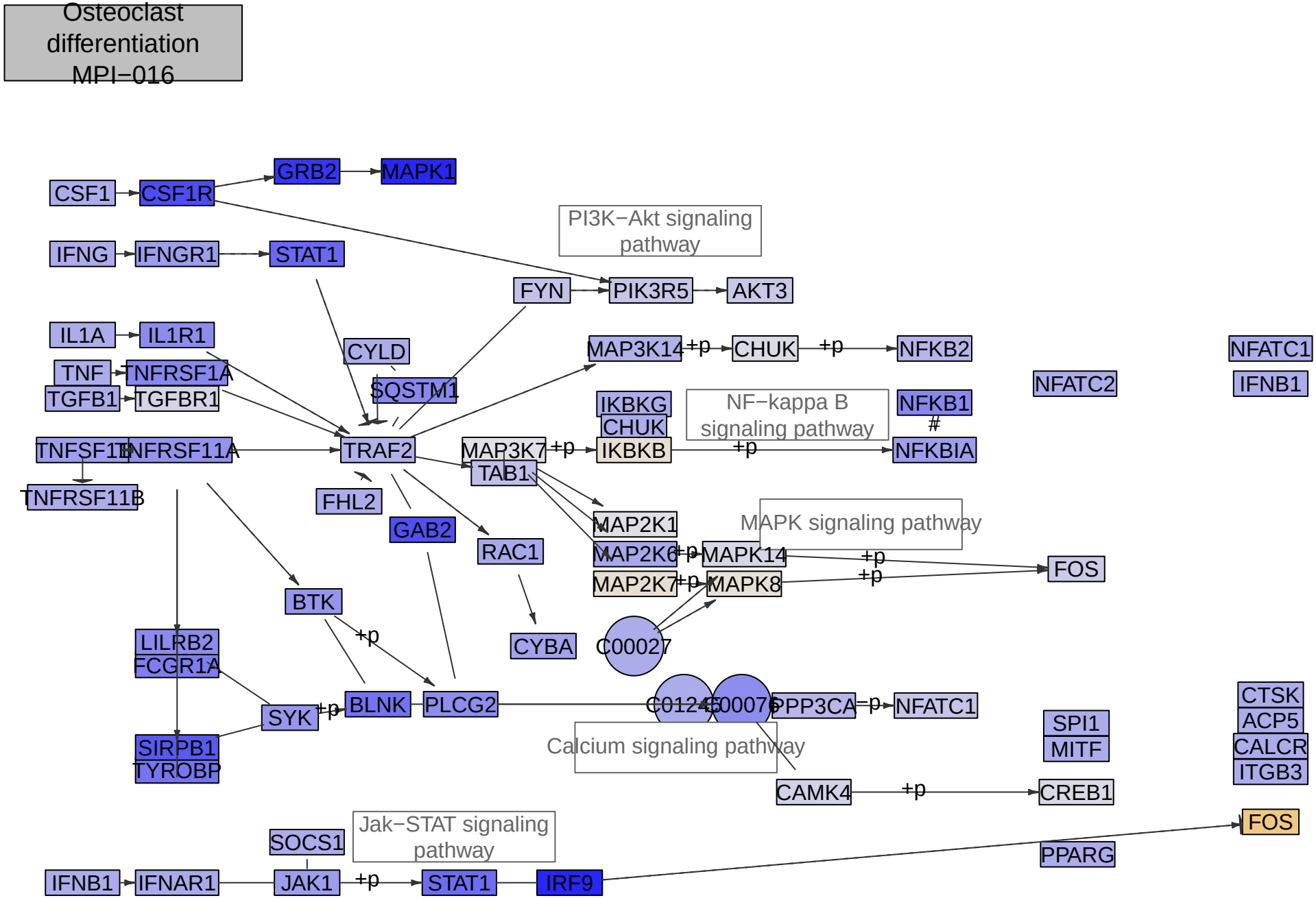

Osteoclast differentiation MPI−001
GRB2
MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−002
GRB2
MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−003
GRB2
MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−005
GRB2
MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−006
GRB2
MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
+p
CYBA
C00027
FCGR1A
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−016
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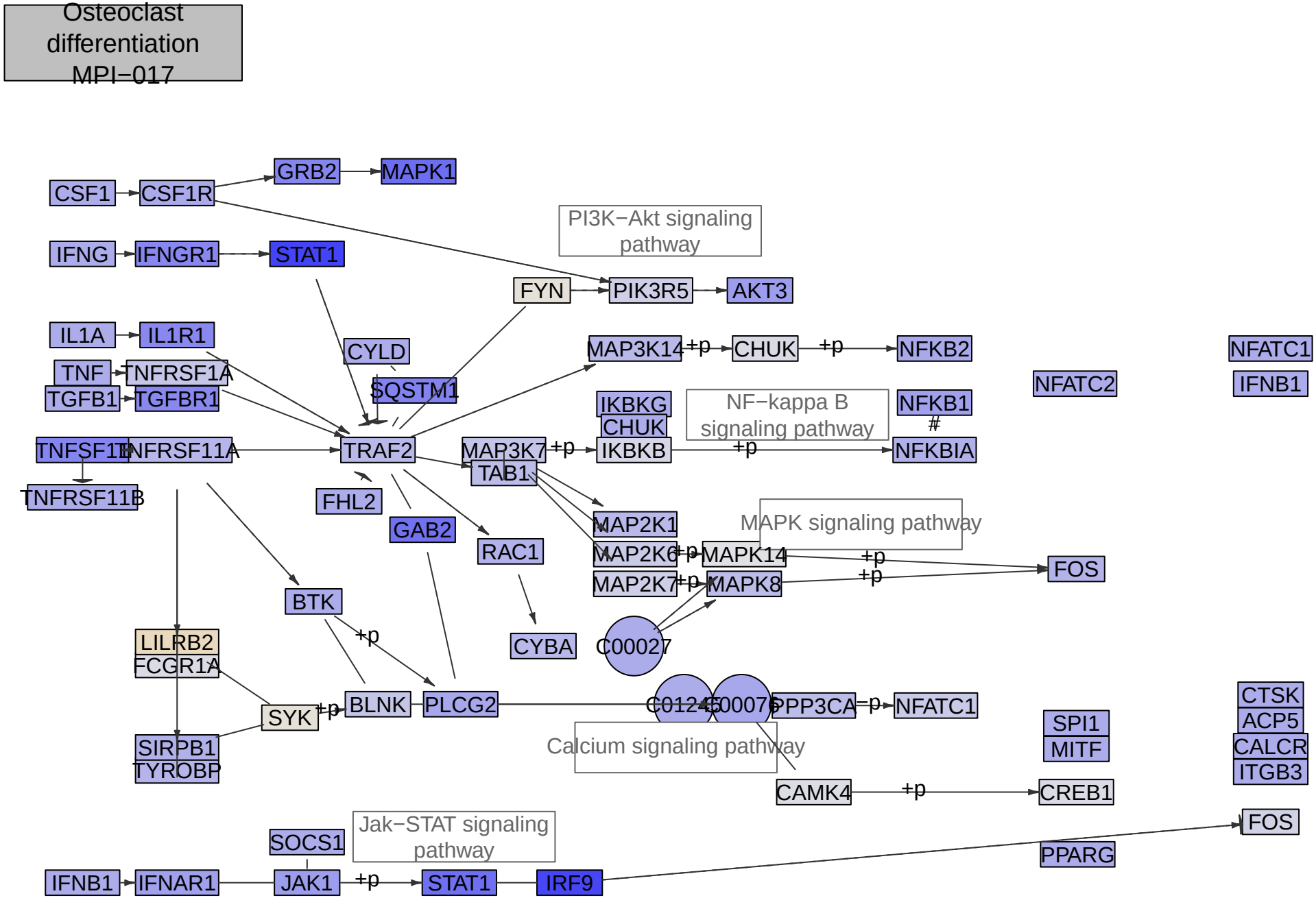
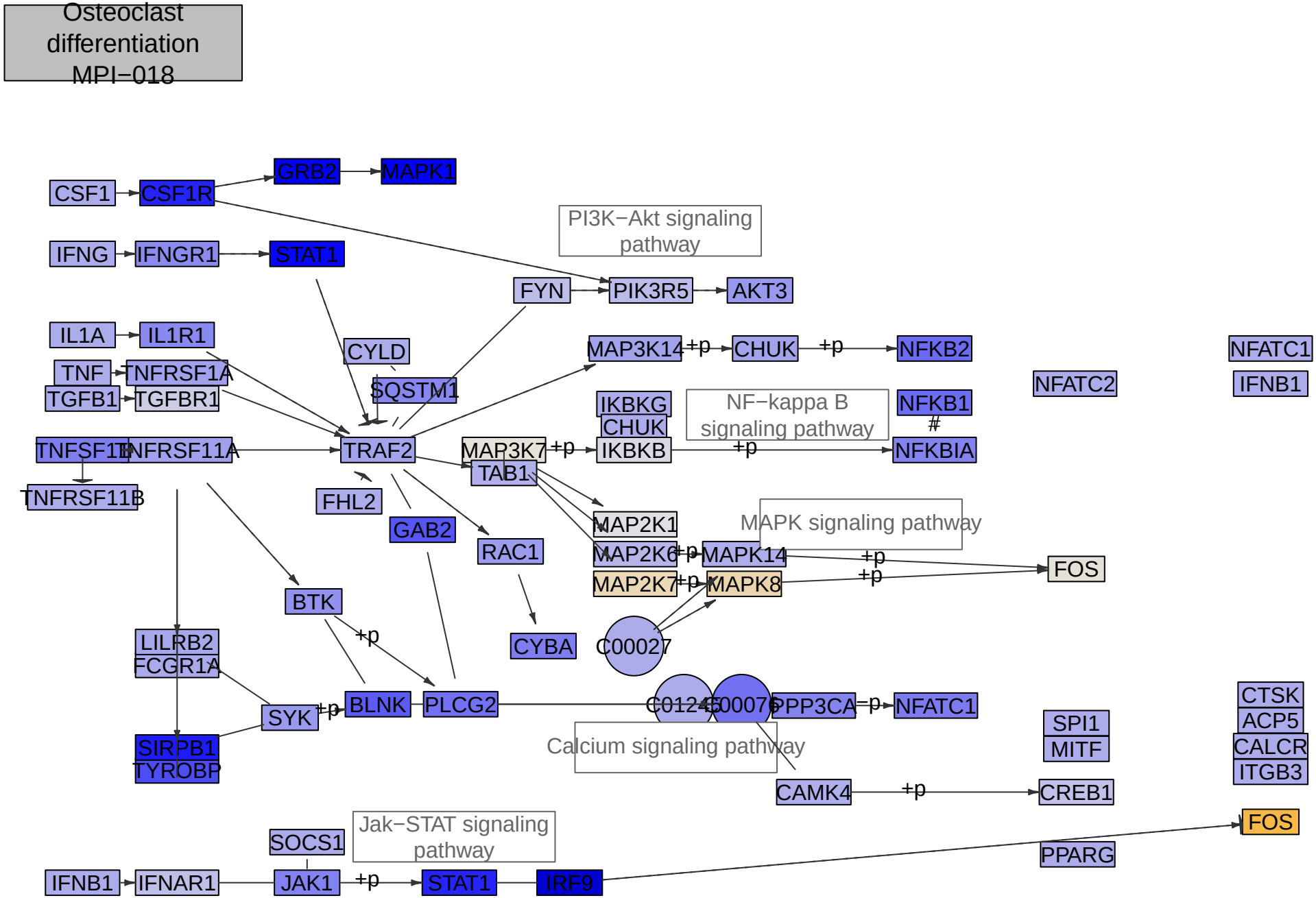
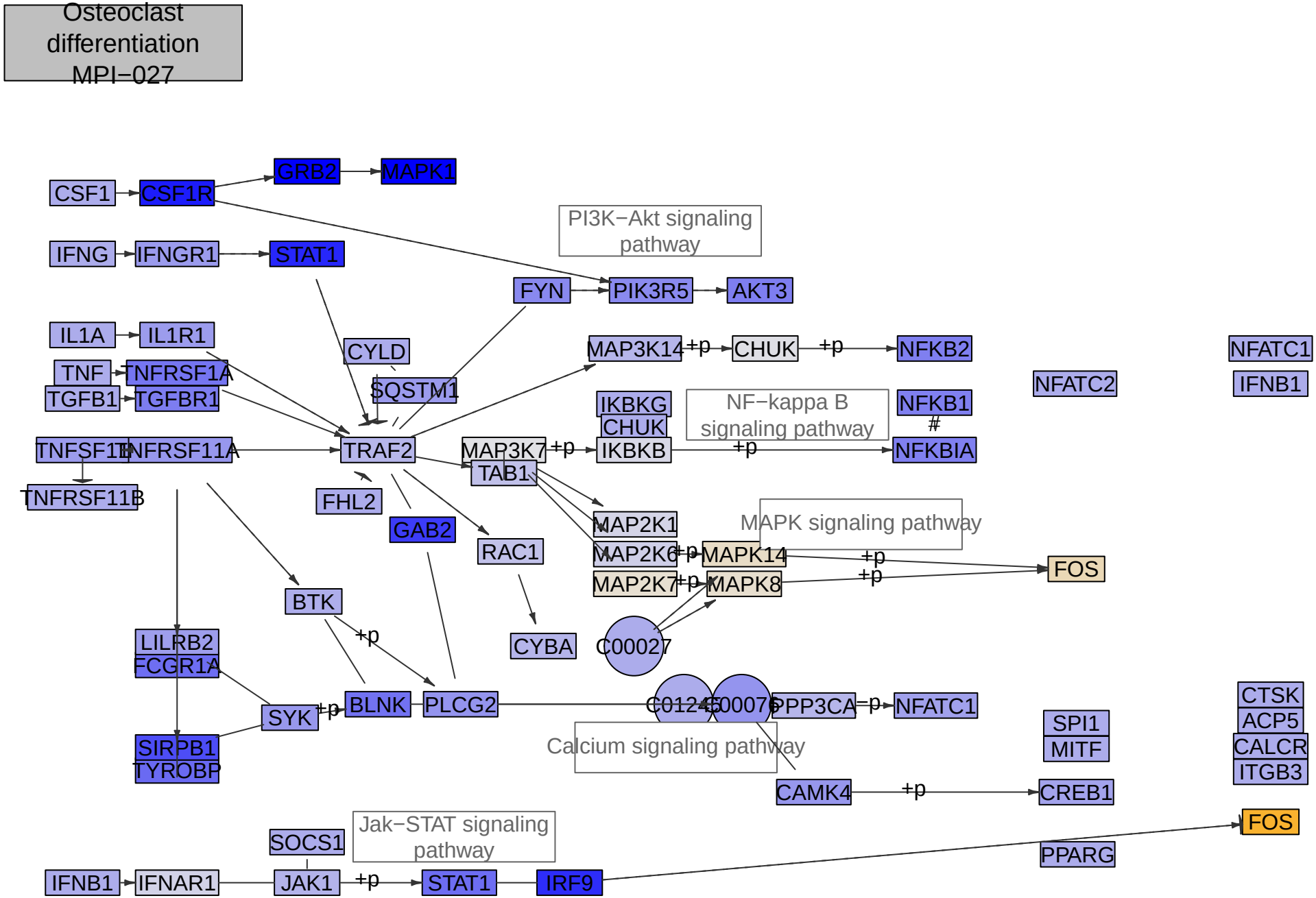
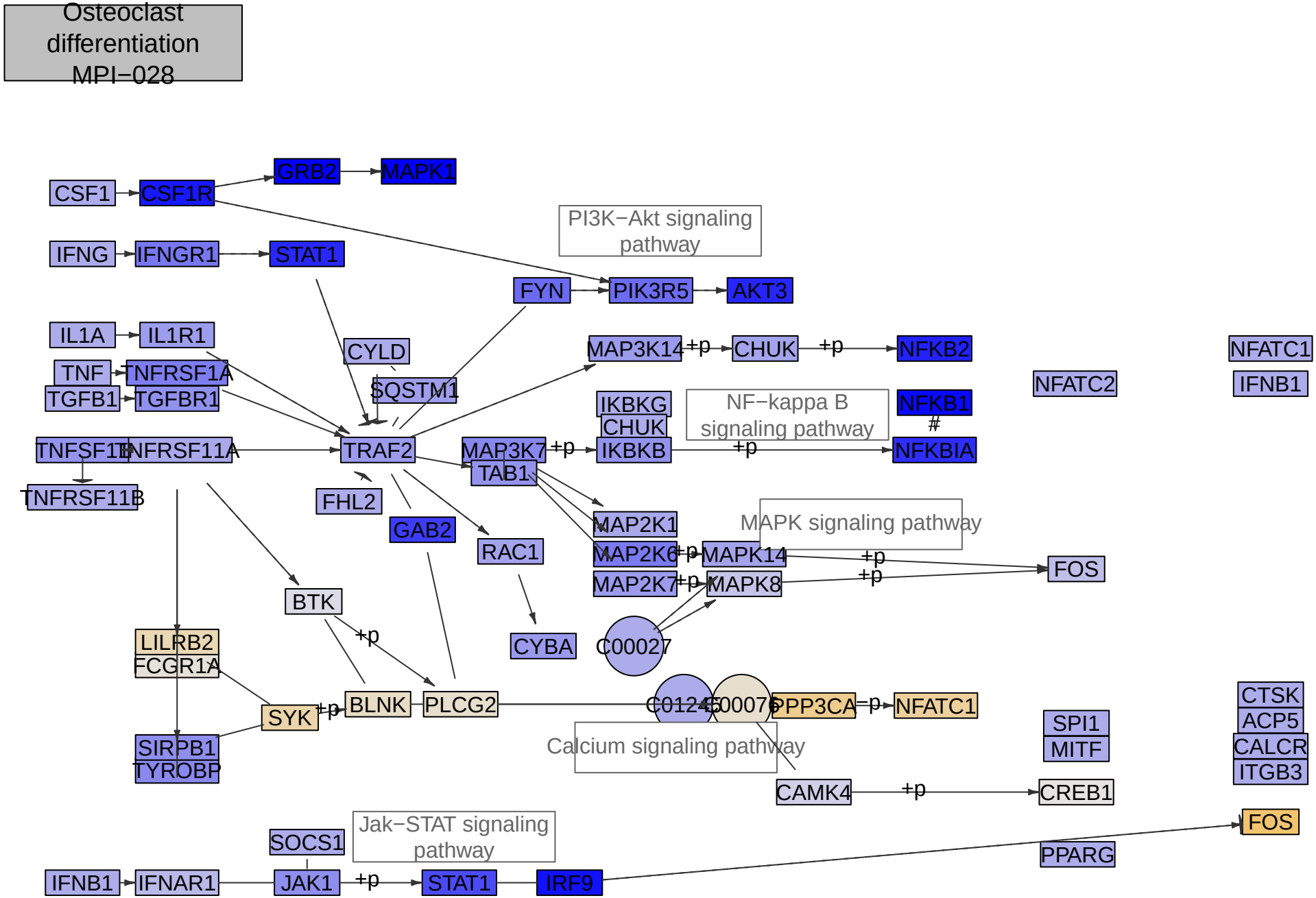
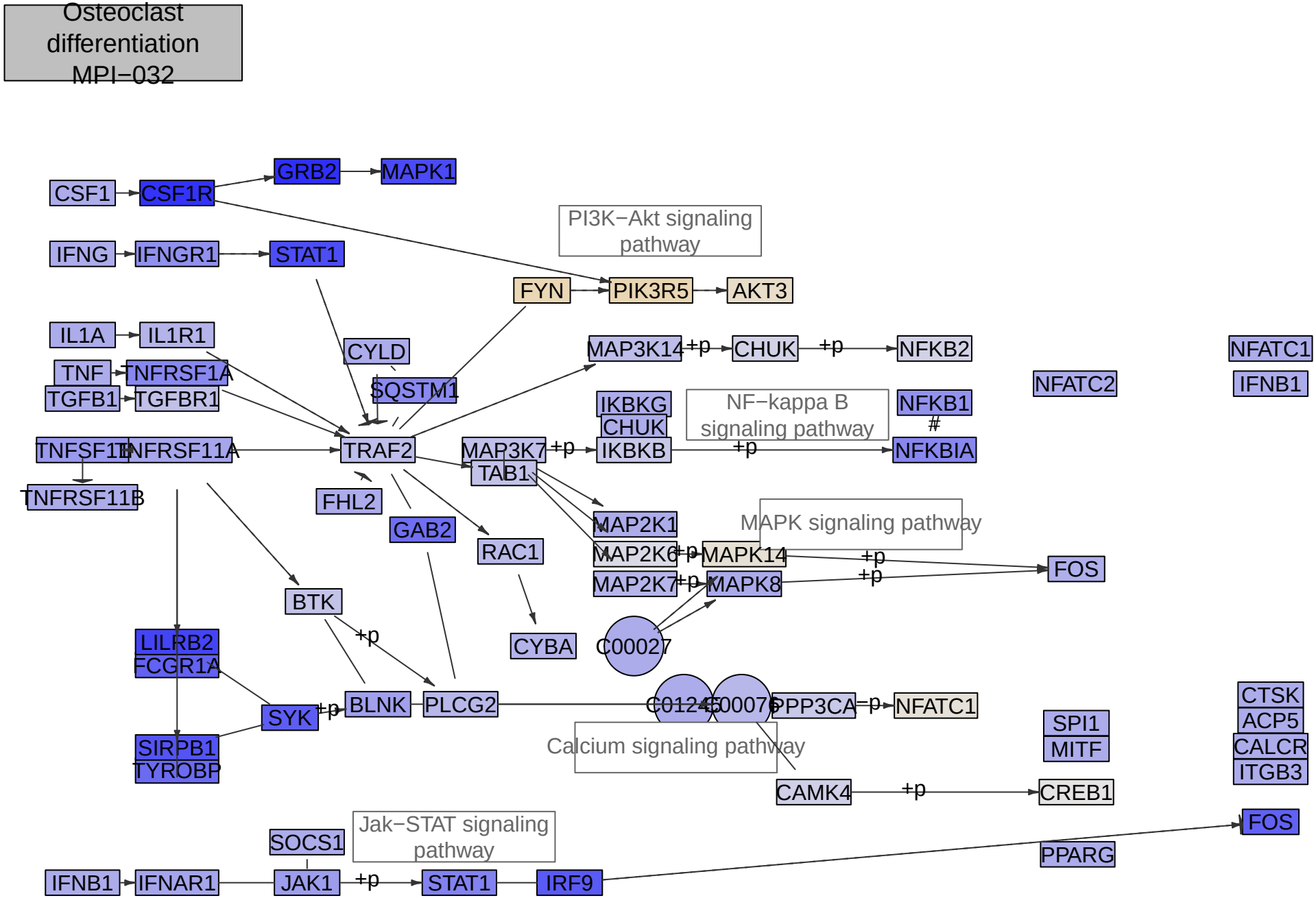
MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
MAP2K1
MAPK signaling pathway
GAB2
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−017
GRB2
MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−018
GRB2
MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
MAP2K1
MAPK signaling pathway
GAB2
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−027
CSF1
CSF1R
GRB2
MAPK1
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−028
GRB2
MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−032
GRB2
MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
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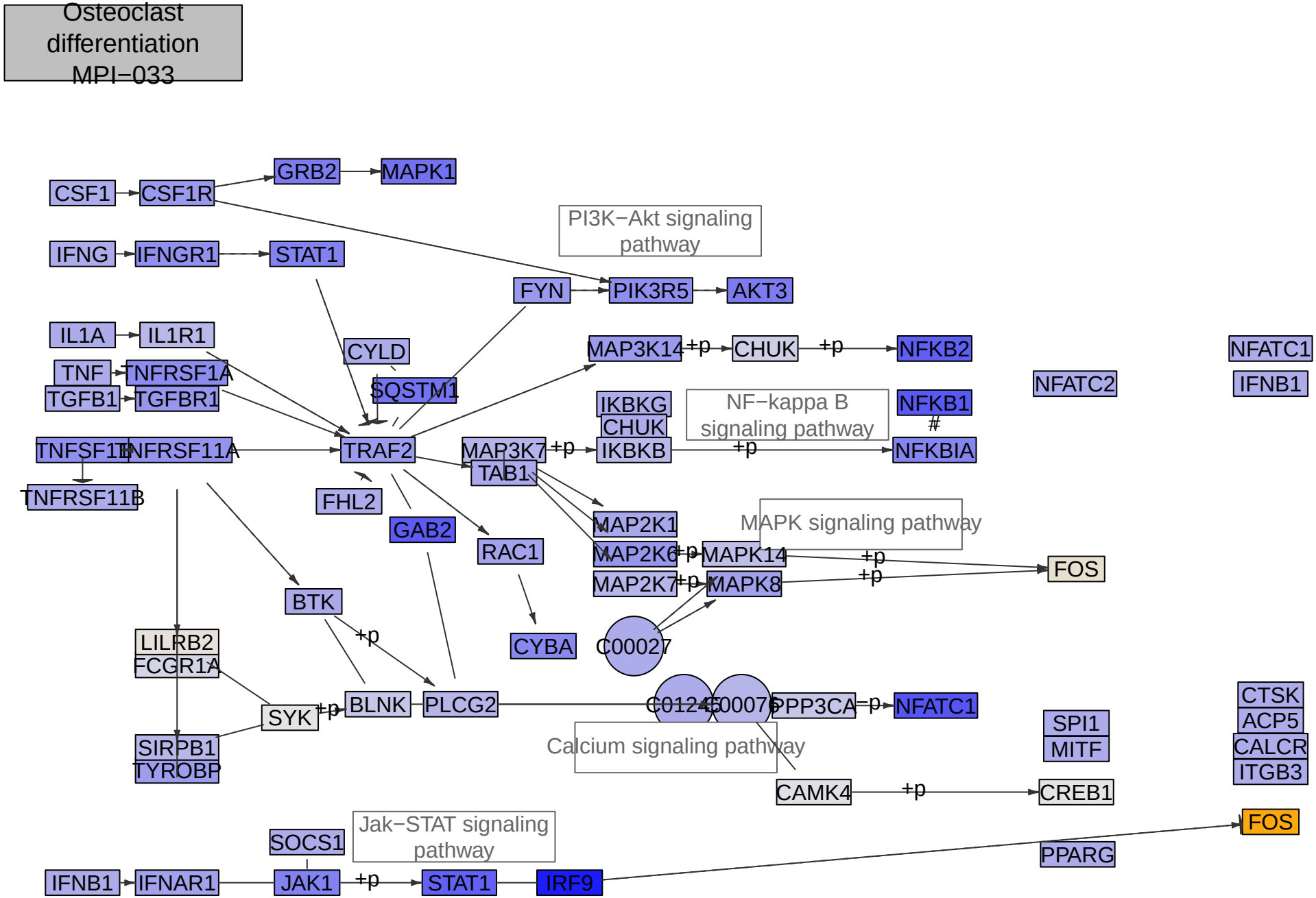
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9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PI3K−Akt signaling pathway
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STAT1
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AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
CAMK4
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CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
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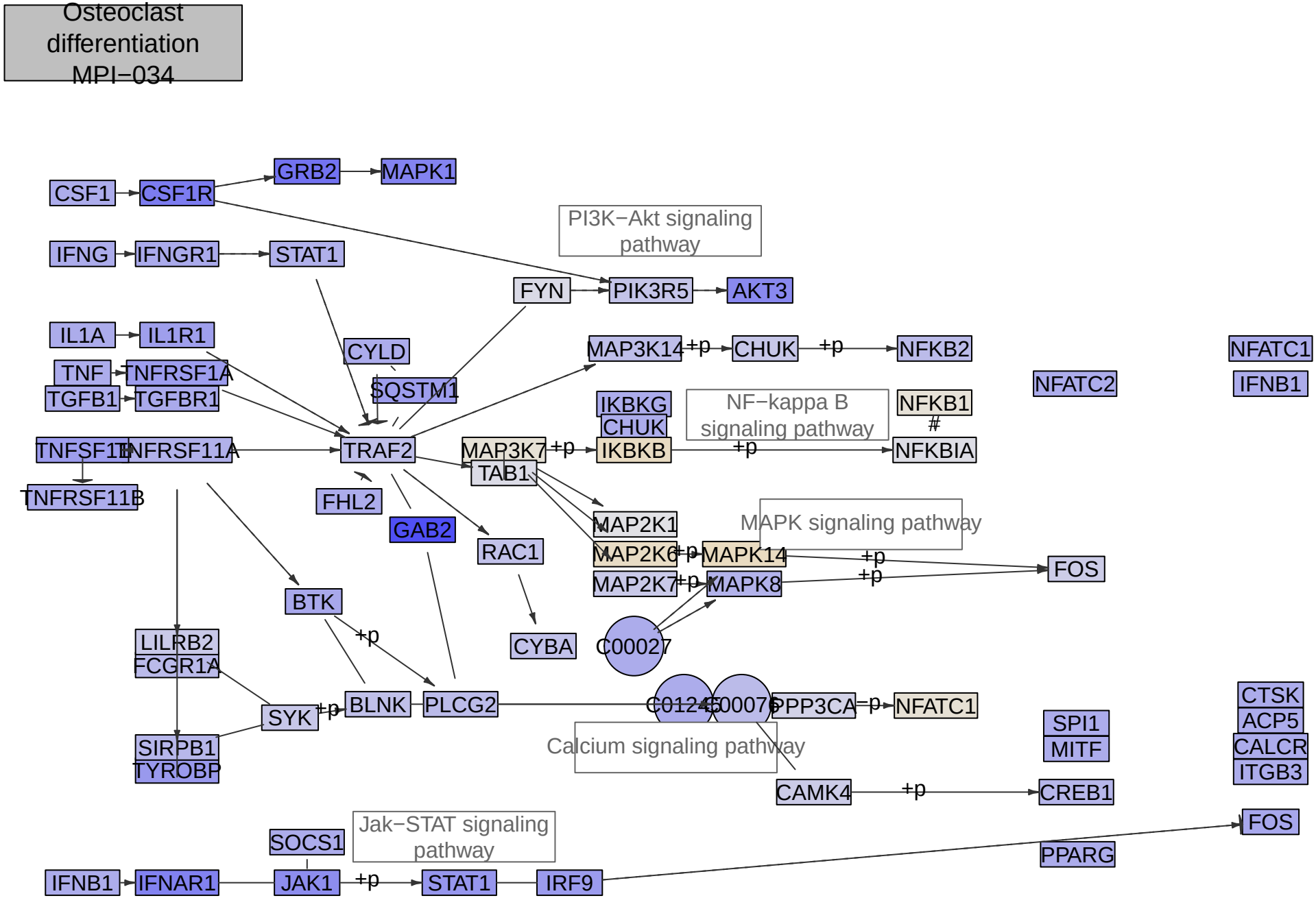
STAT1
IRF9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FYN
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AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
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IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
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CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
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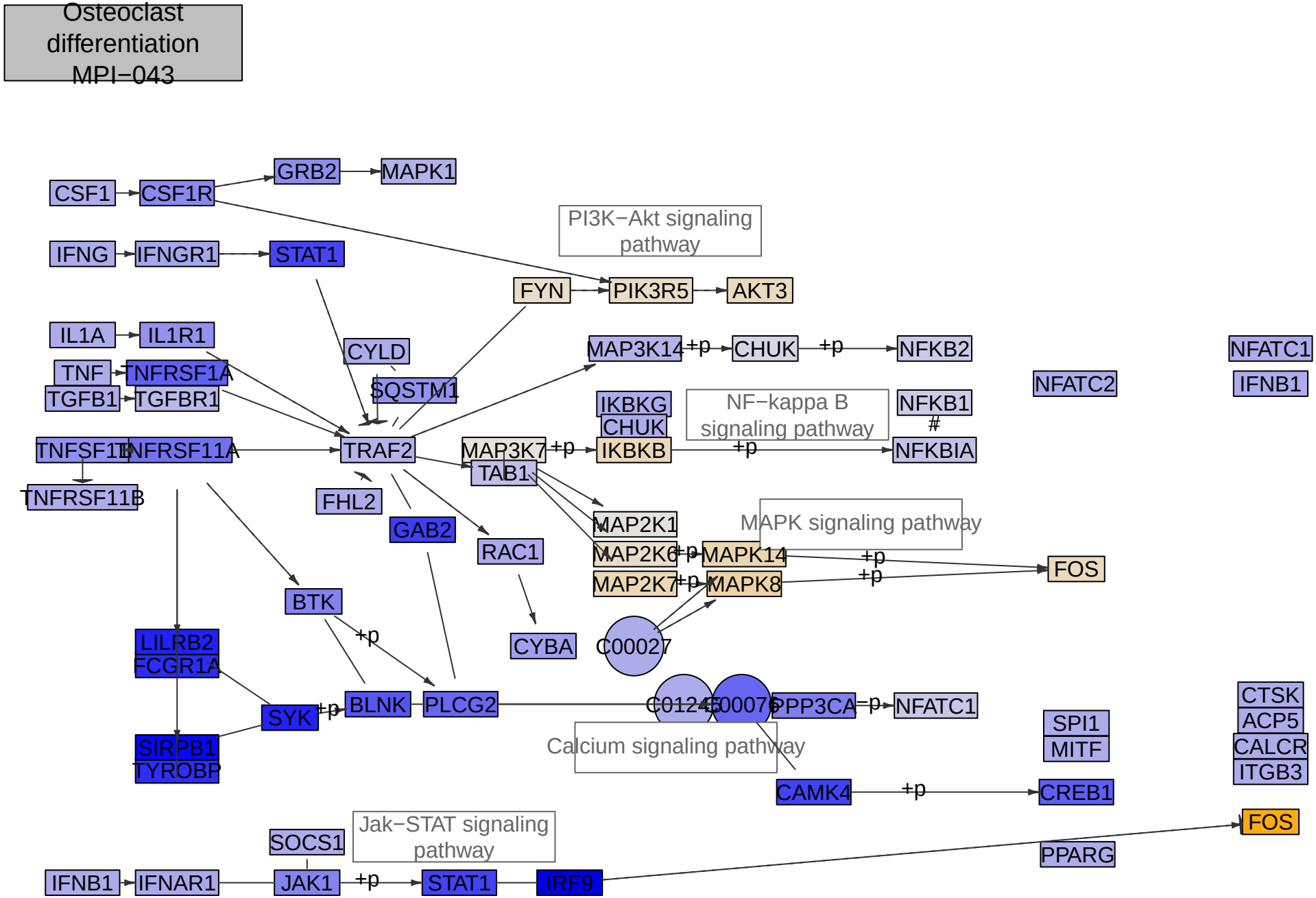
IRF9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AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
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IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
MAP2K1
MAPK signaling pathway
GAB2
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
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NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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SOCS1
Jak−STAT signaling pathway
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IFNB1
IFNAR1
JAK1
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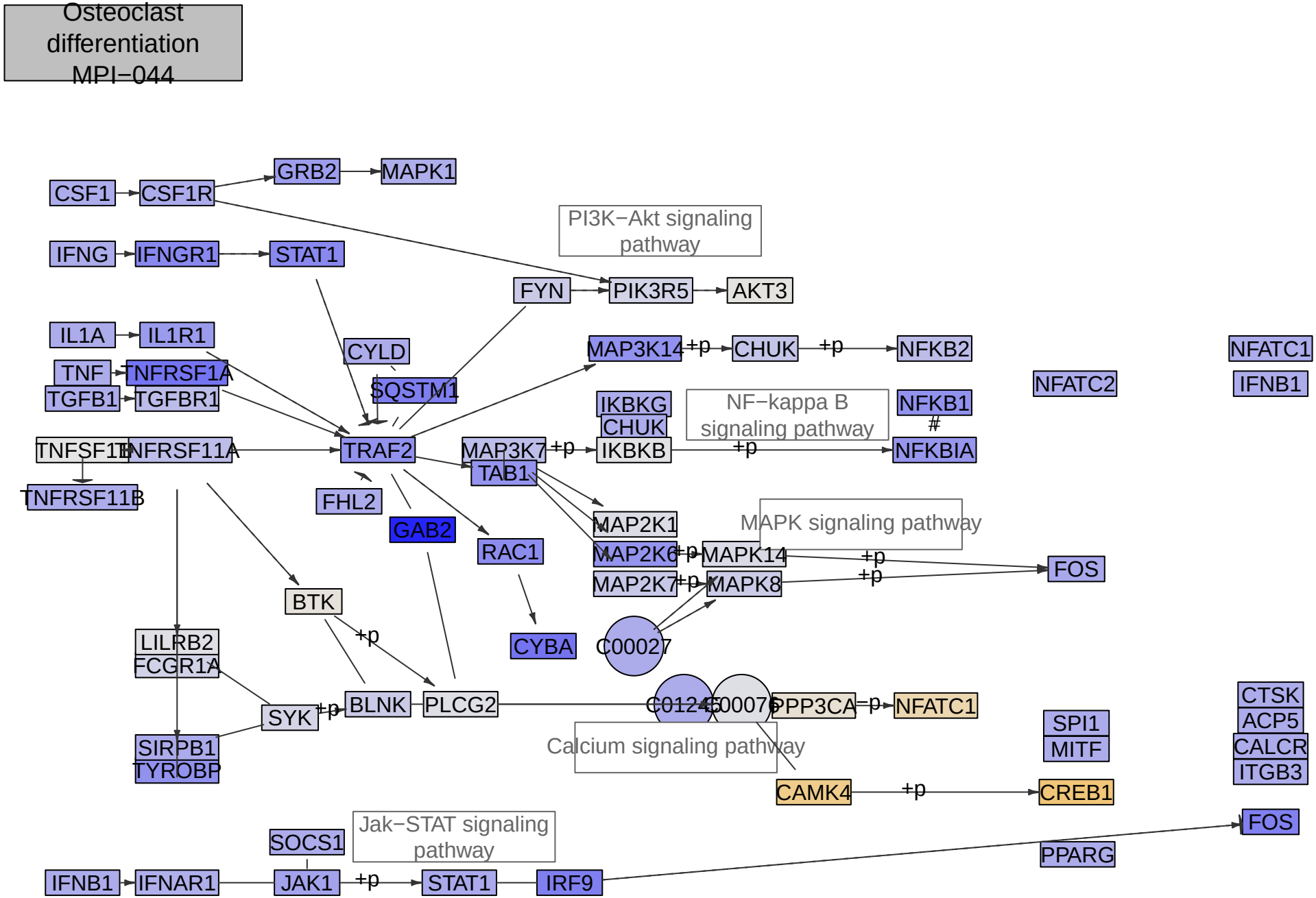
STAT1
IRF9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STAT1
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AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
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TNF
TNFRSF1A
SQSTM1
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TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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CREB1
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SOCS1
Jak−STAT signaling pathway
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IFNAR1
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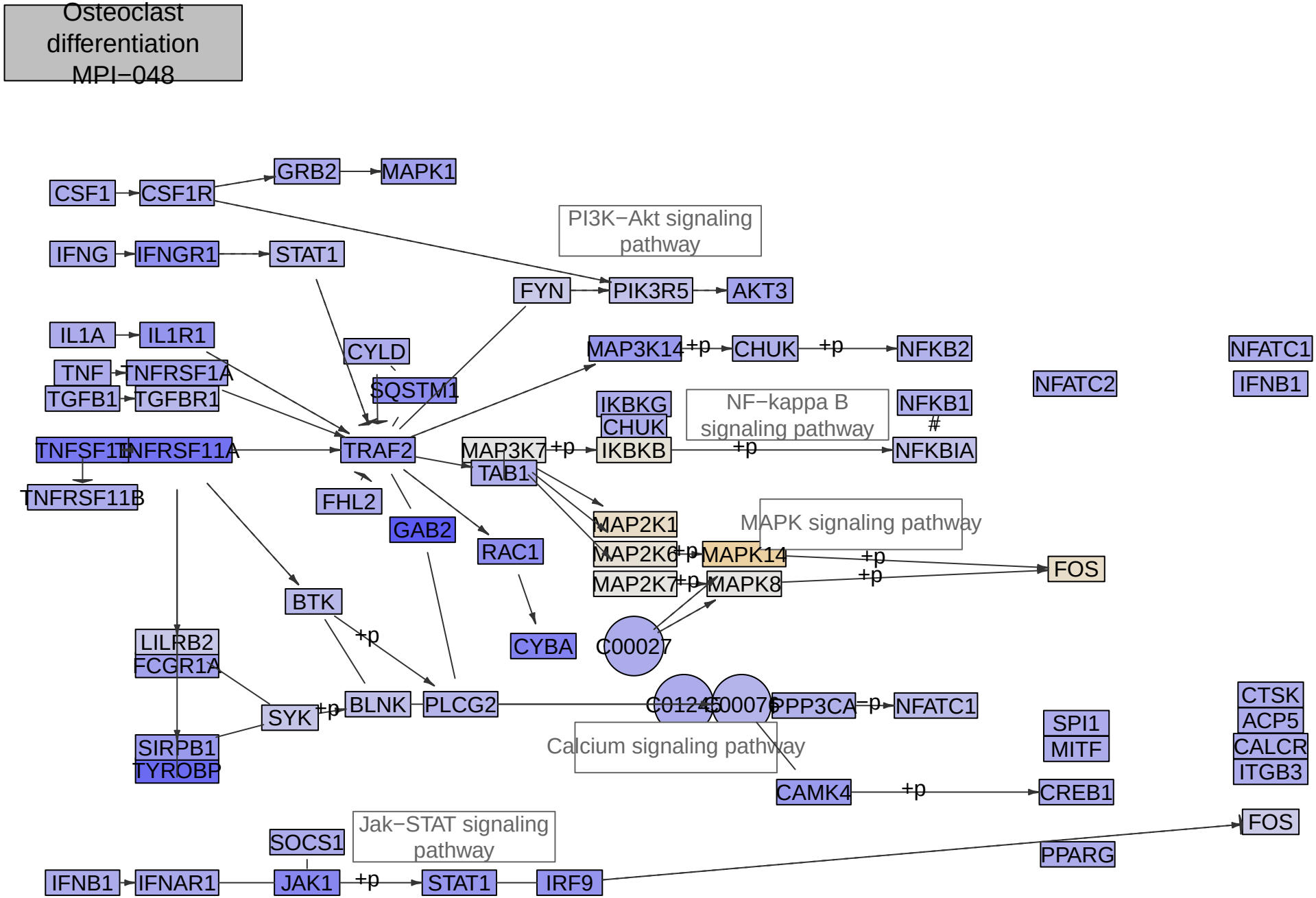
STAT1
IRF9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FYN
PIK3R5
AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
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BLNK
PLCG2
C01245
C00076
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CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
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ITGB3
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IFNAR1
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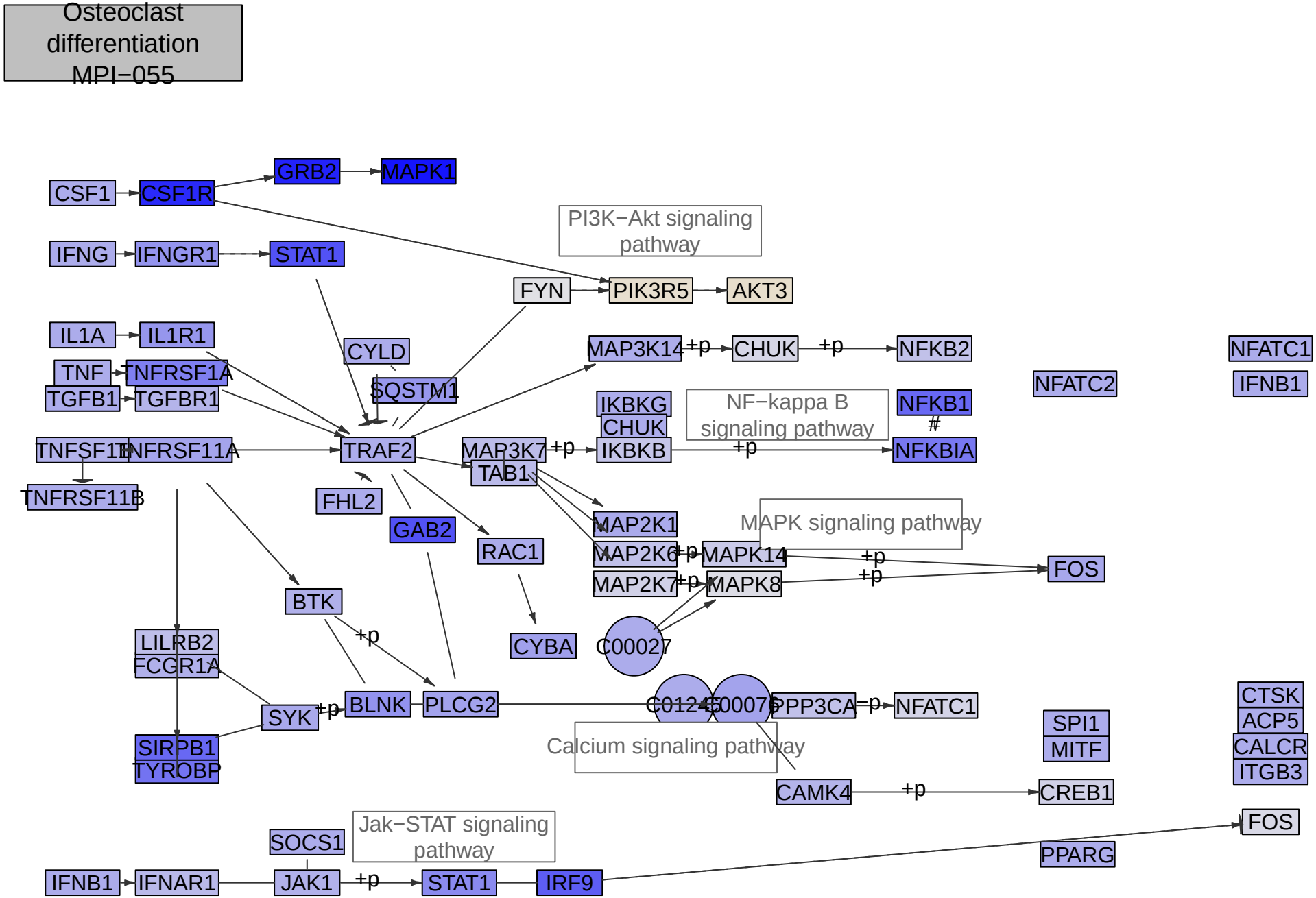
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AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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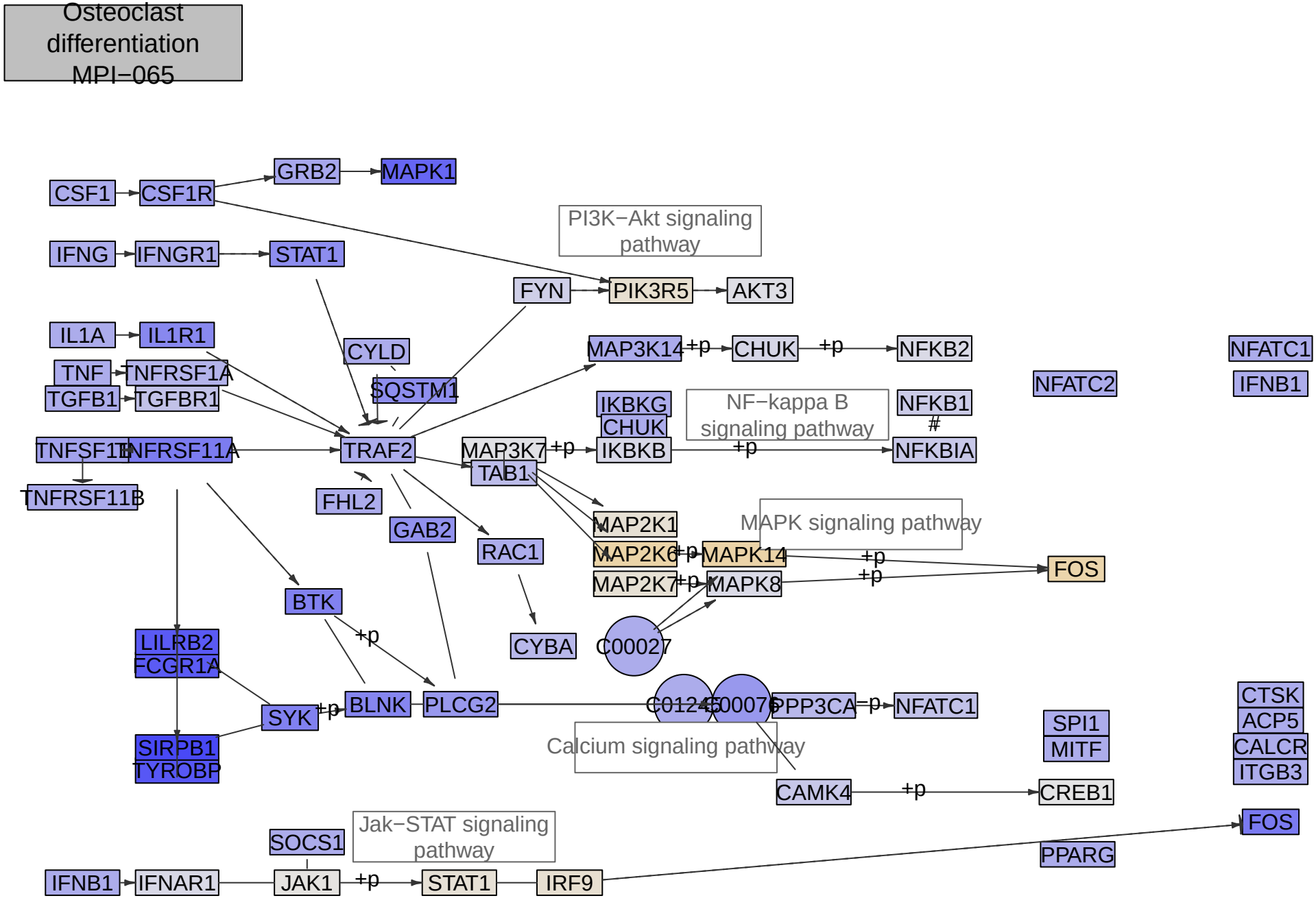
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9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AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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CREB1
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SOCS1
Jak−STAT signaling pathway
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IFNB1
IFNAR1
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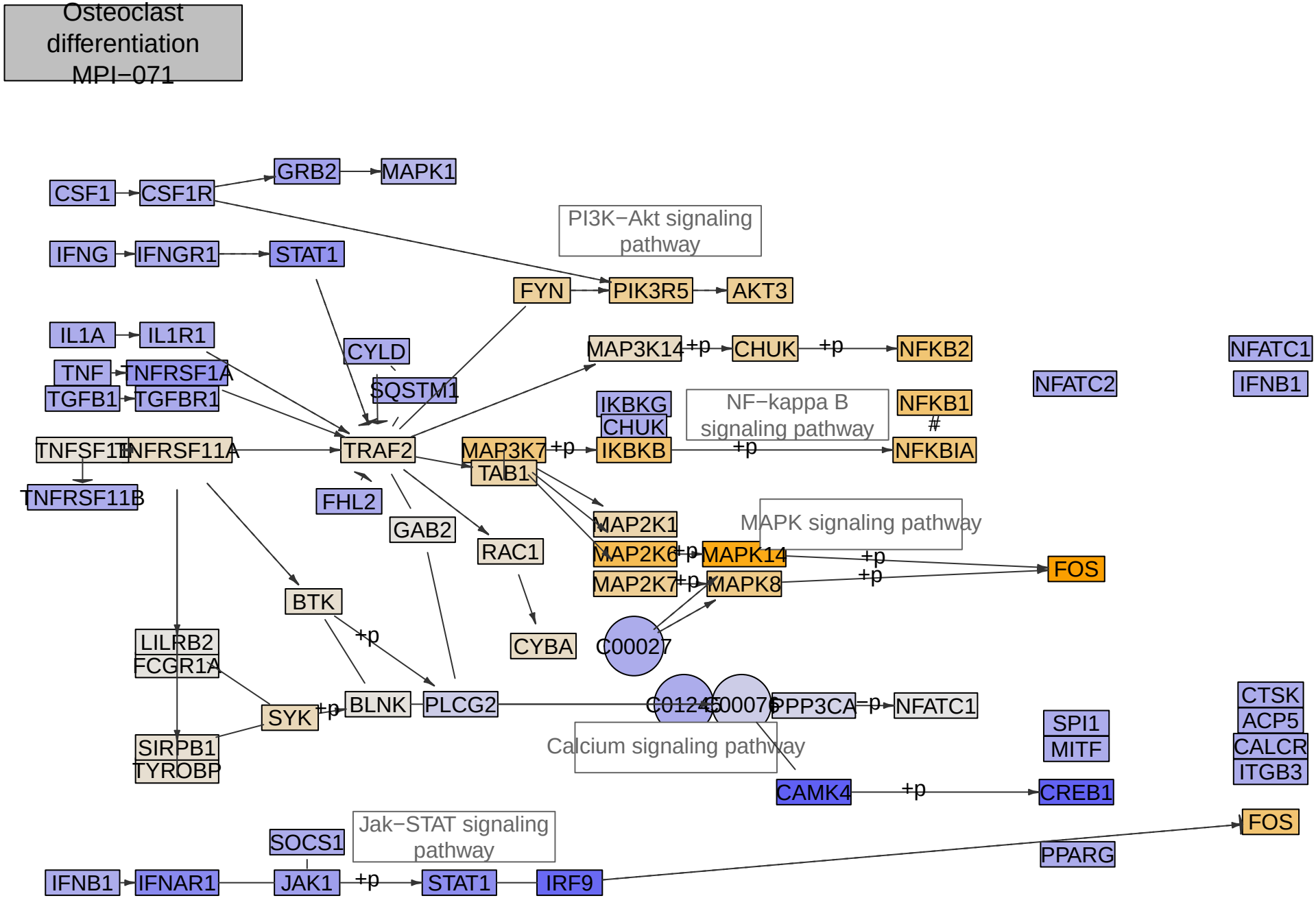
STAT1
IRF9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AKT3
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CYLD
MAP3K14
+p
CHUK
+p
NFKB2
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SQSTM1
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TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
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CYBA
C00027
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BLNK
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C00076
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SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
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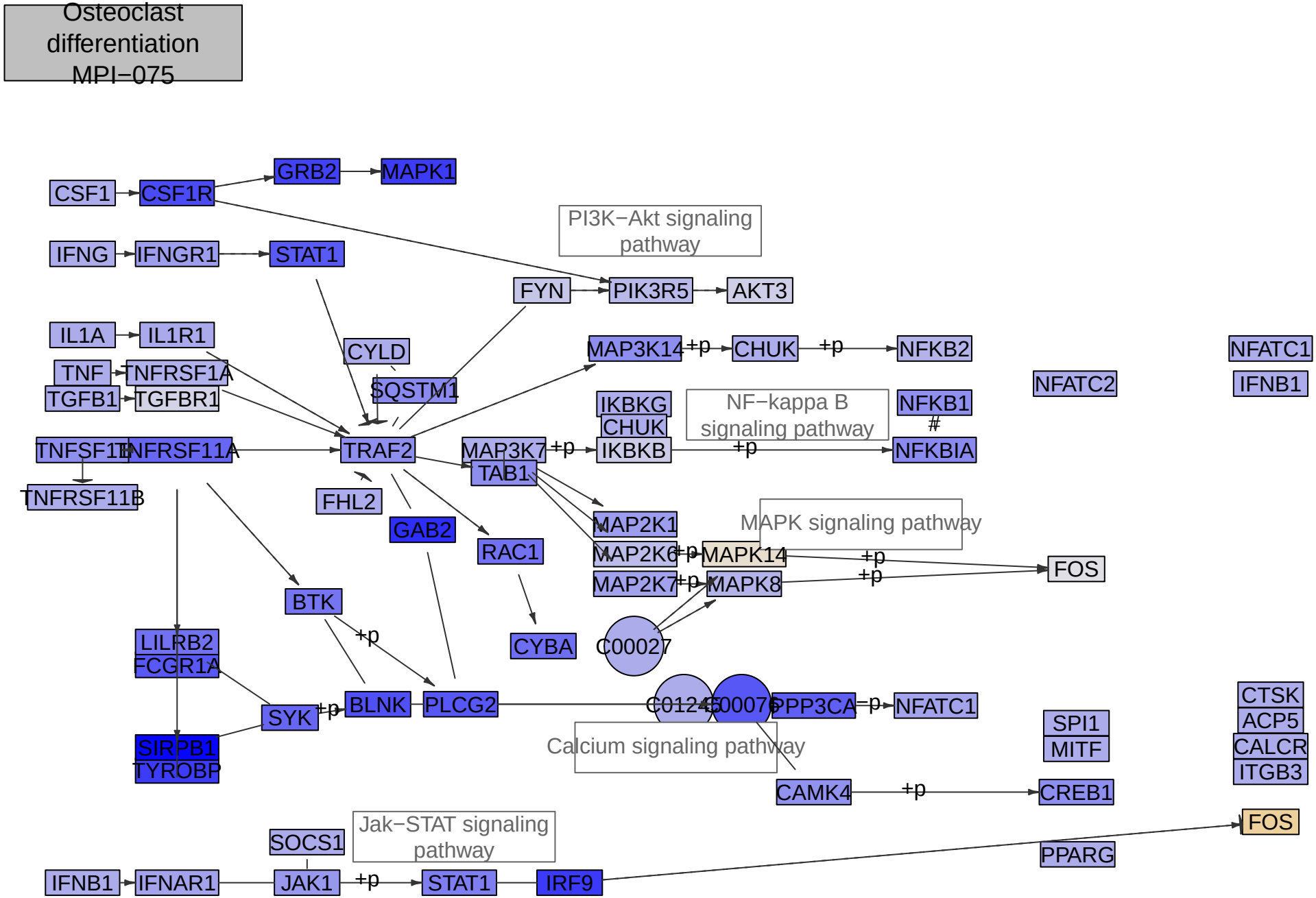
IRF9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CYLD
MAP3K14
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CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
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IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TRAF2
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IKBKB
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NFKBIA
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FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
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MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
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FCGR1A
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CYBA
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BLNK
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TYROBP
Calcium signaling pathway
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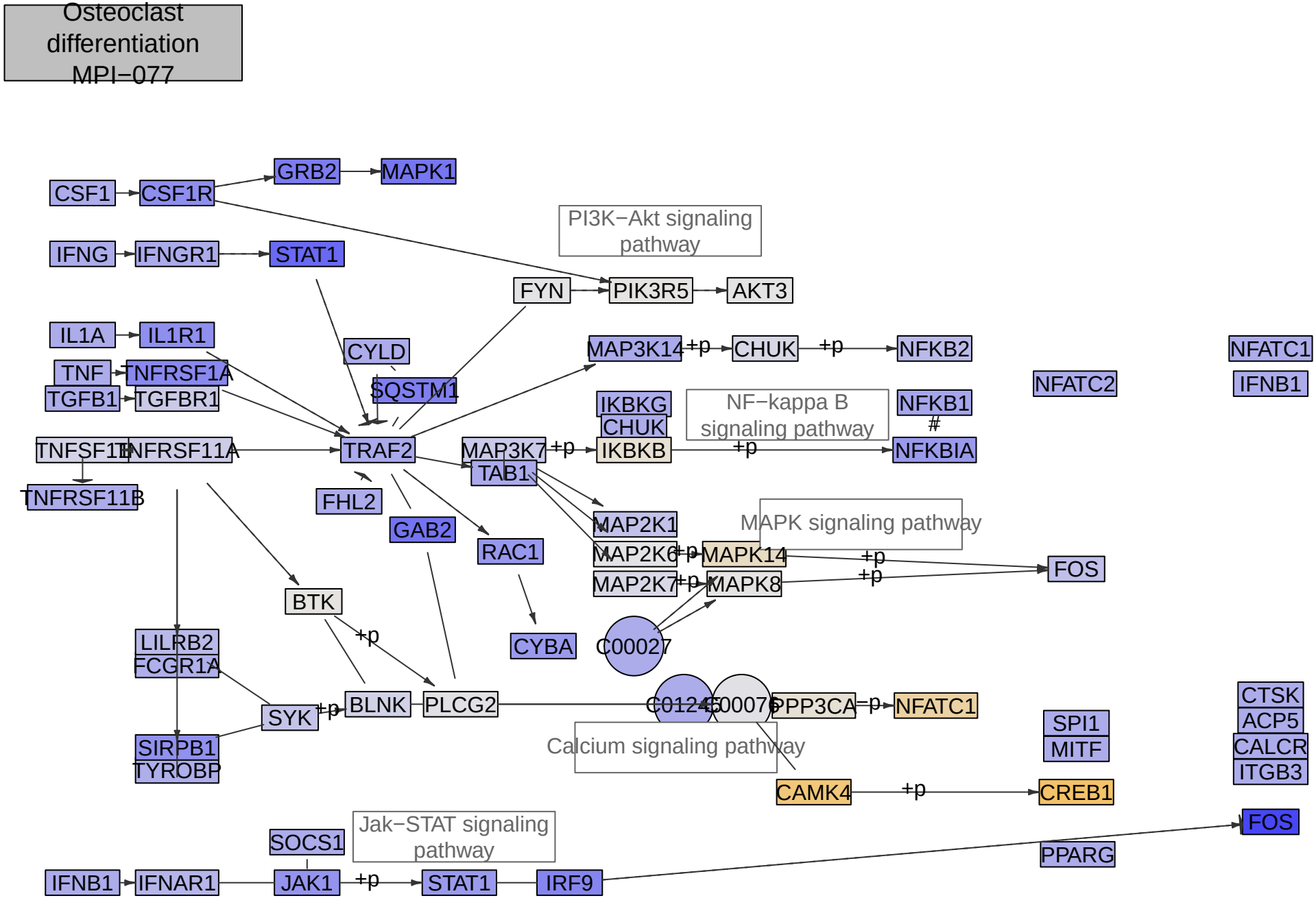
IRF9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IFNB1
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TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
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MAPK14
+p
FOS
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MAPK8
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SIRPB1
TYROBP
Calcium signaling pathway
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Jak−STAT signaling pathway
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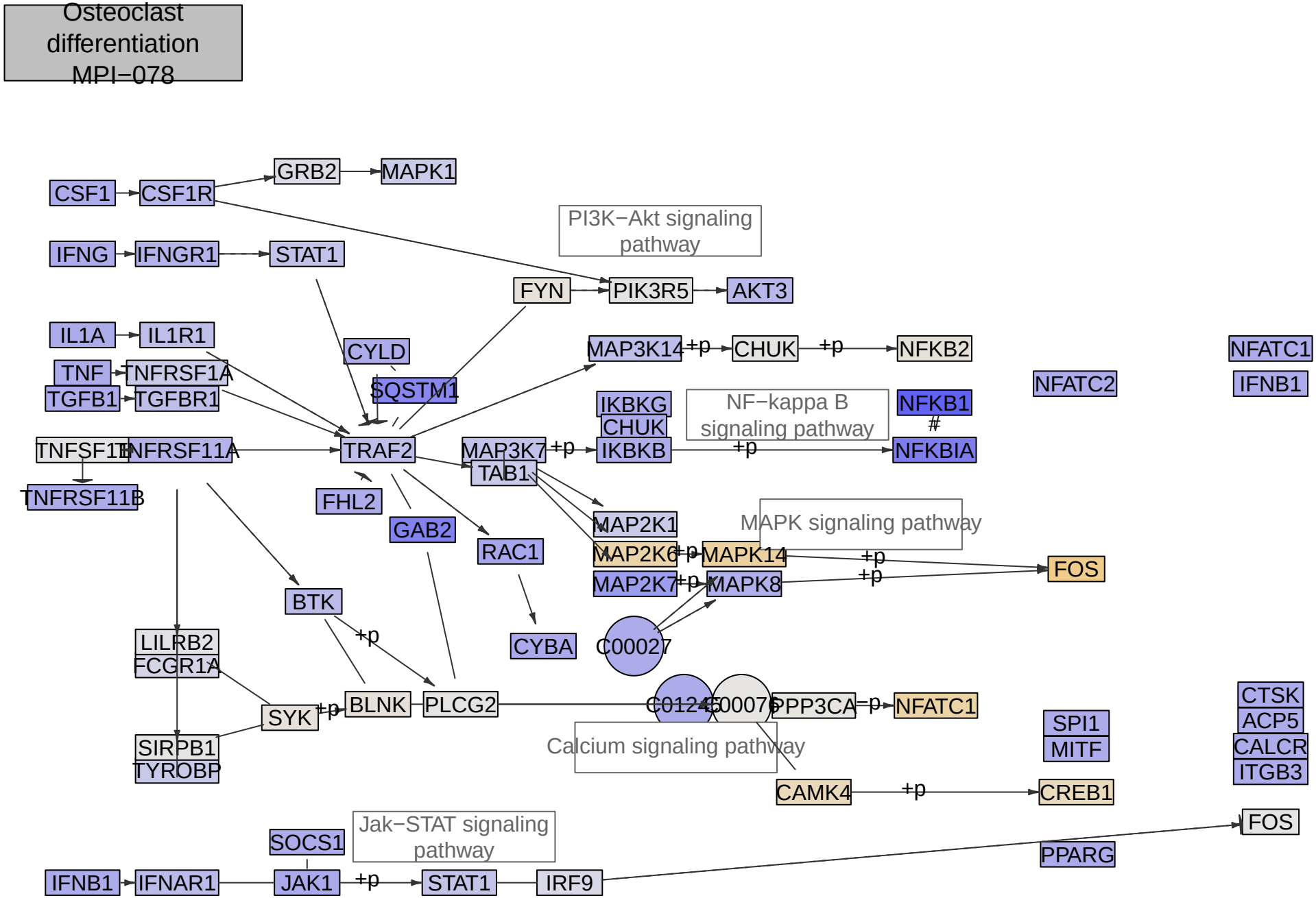
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TNF
TNFRSF1A
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TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
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MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
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Calcium signaling pathway
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Jak−STAT signaling pathway
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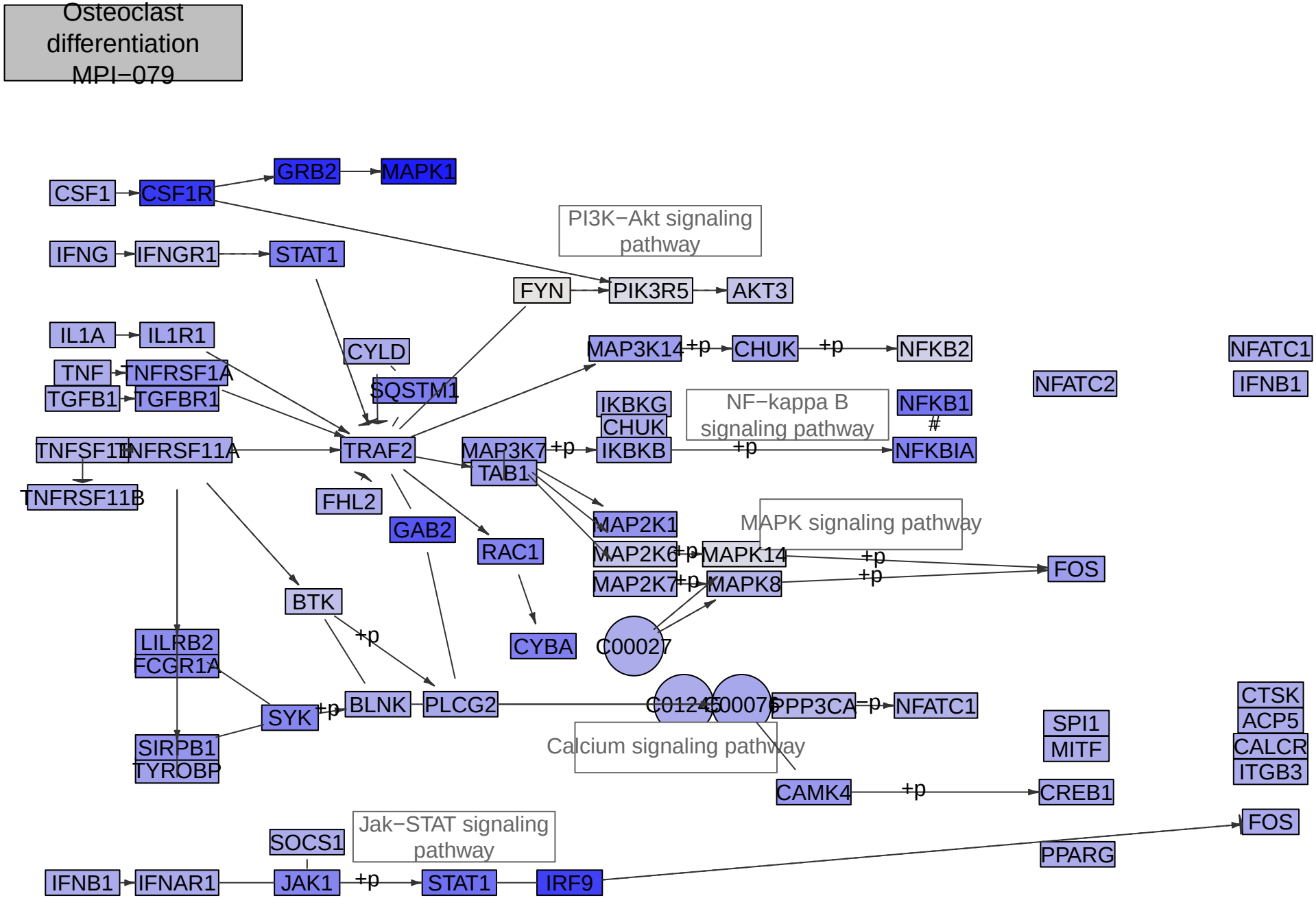
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TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
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MAP2K7
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MAPK8
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Jak−STAT signaling pathway
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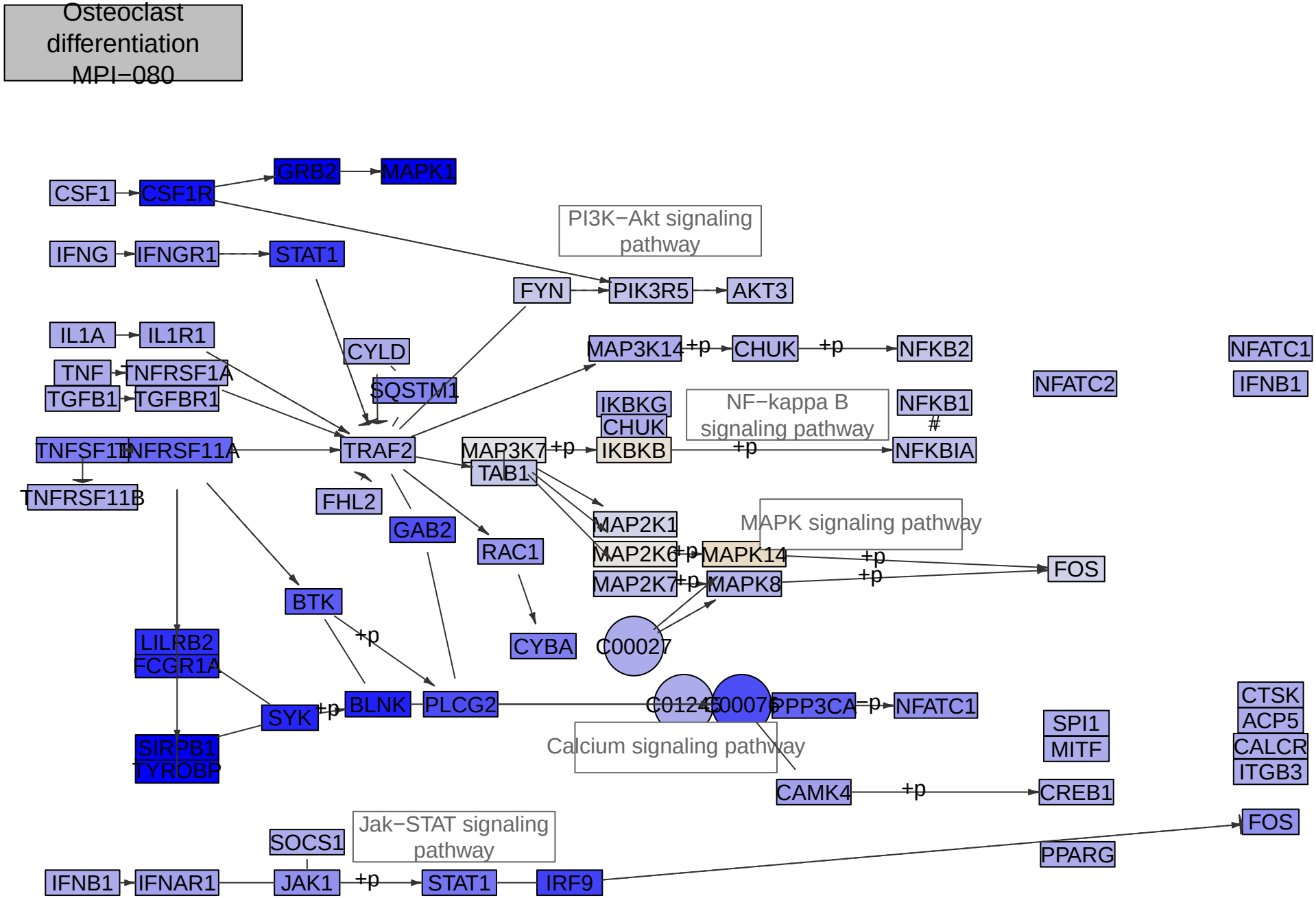
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AKT3
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MAP3K14
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TNF
TNFRSF1A
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NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
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Calcium signaling pathway
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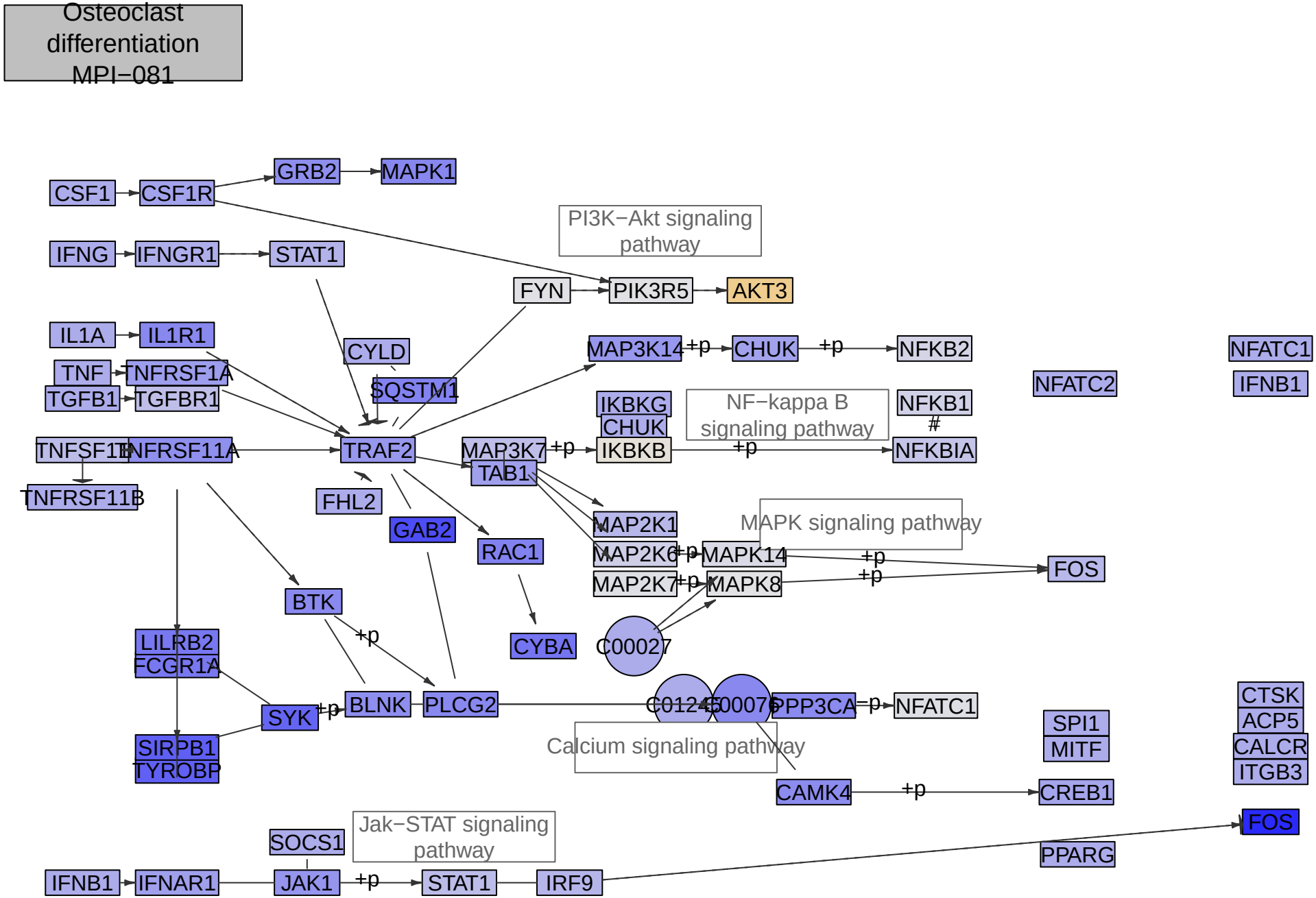
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MAPK1
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
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CHUK
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TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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+p
NFKBIA
TAB1
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GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
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MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
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BLNK
PLCG2
C01245
C00076
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MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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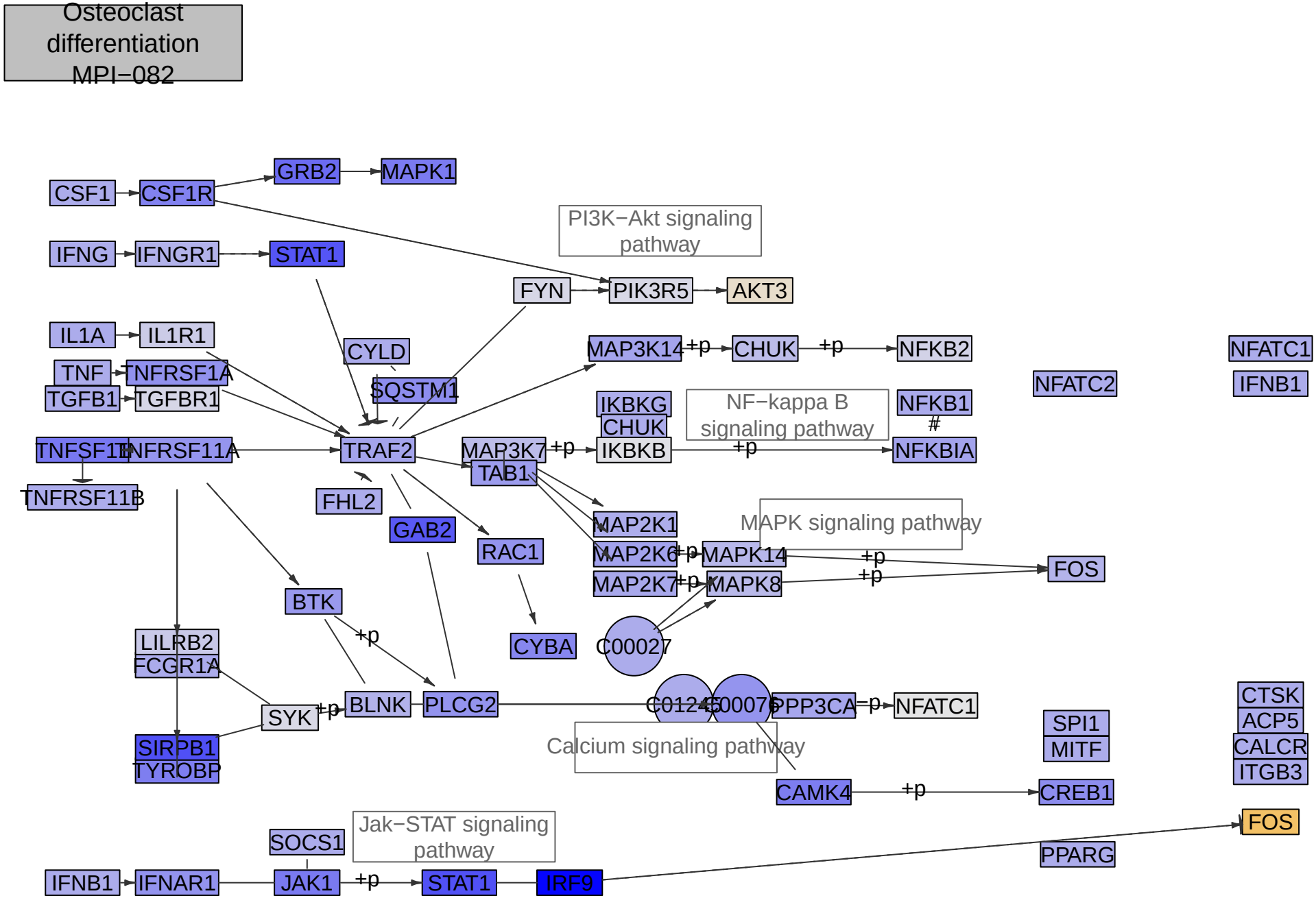
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GAB2
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MAPK signaling pathway
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MAPK14
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MAP2K7
+p
MAPK8
+p
BTK
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CYBA
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SIRPB1
TYROBP
Calcium signaling pathway
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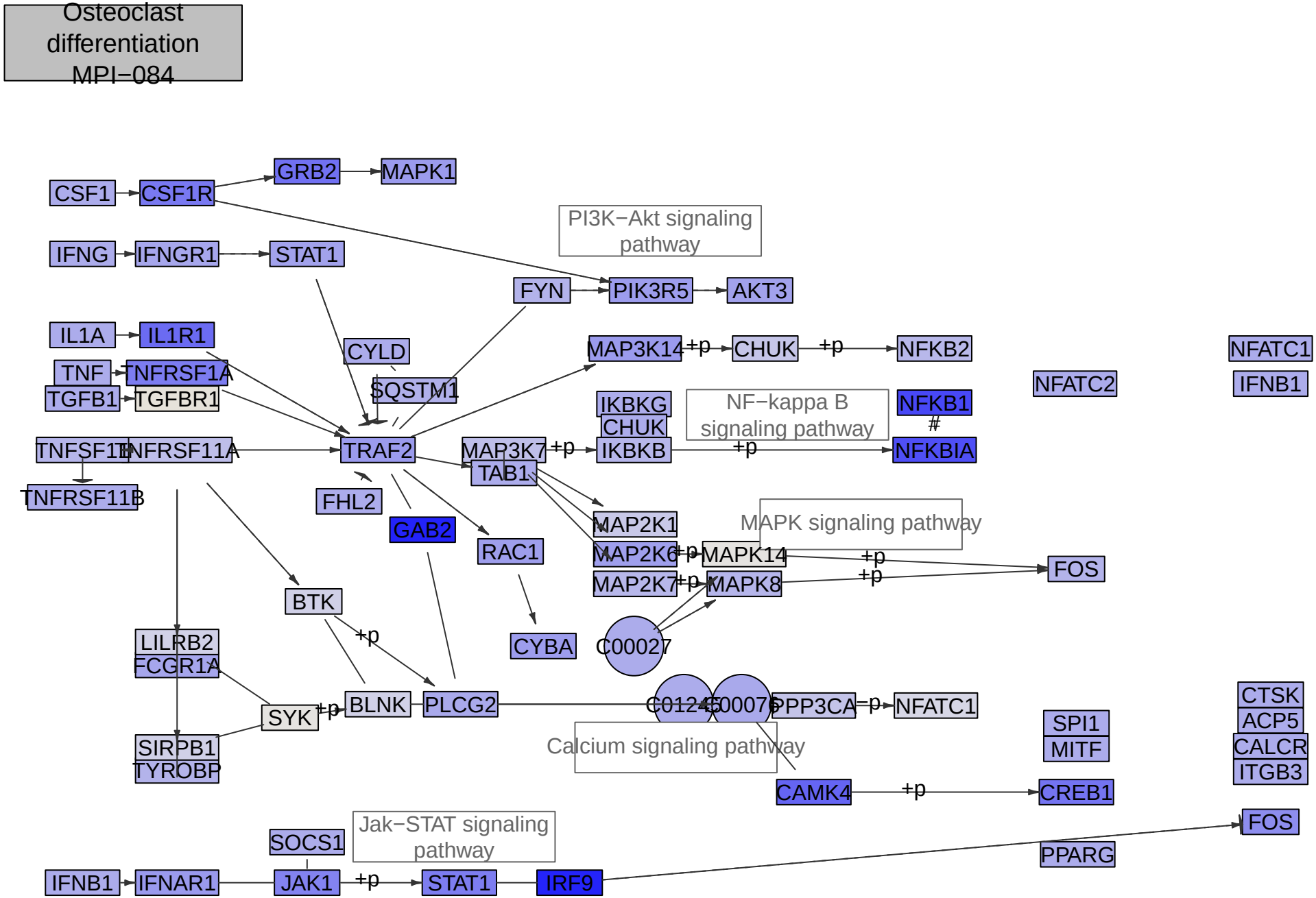
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CHUK
NF−kappa B signaling pathway
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TAB1
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FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
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MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
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TYROBP
Calcium signaling pathway
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ACP5
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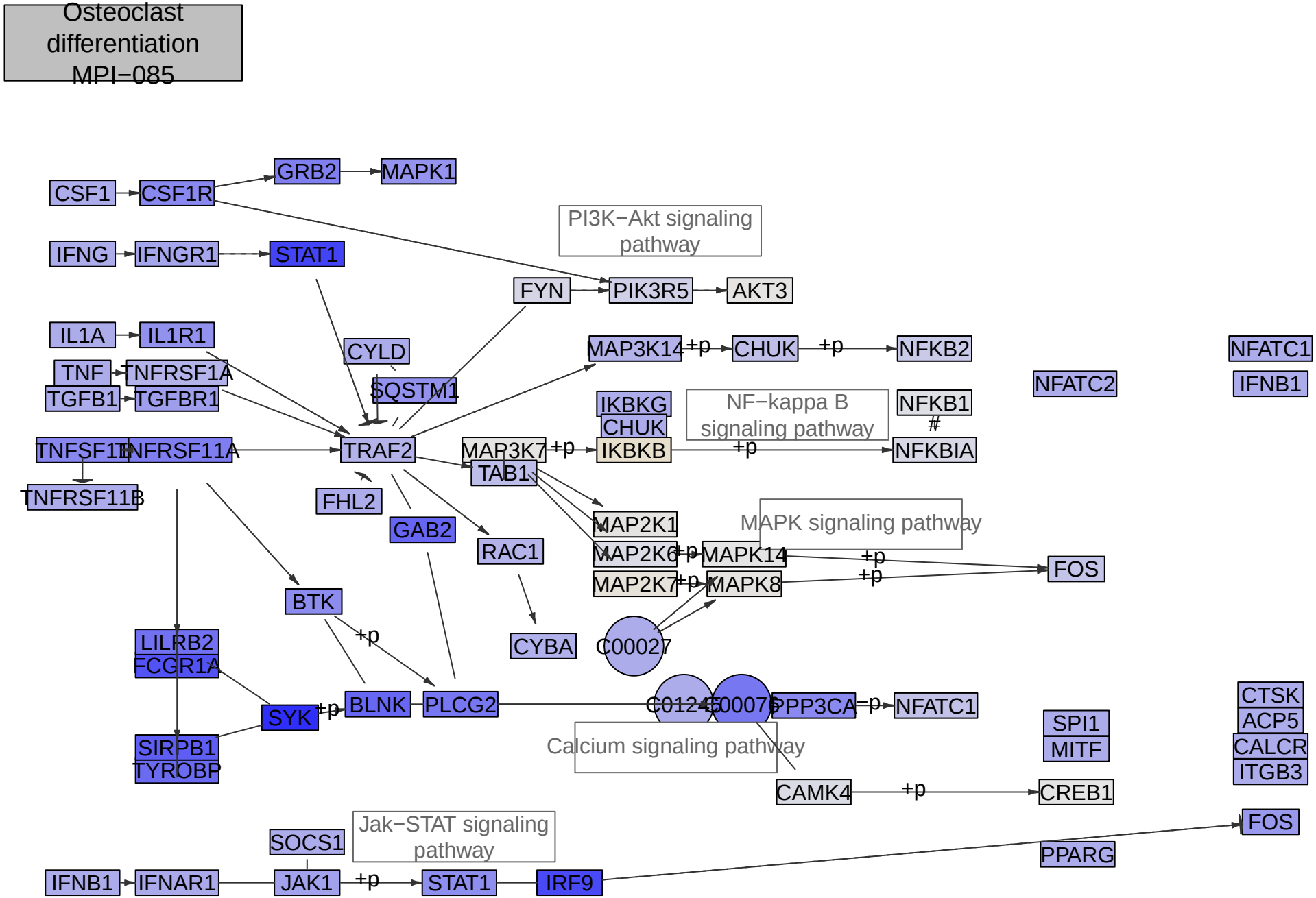
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IKBKB
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MAPK signaling pathway
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MAPK14
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MAP2K7
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TYROBP
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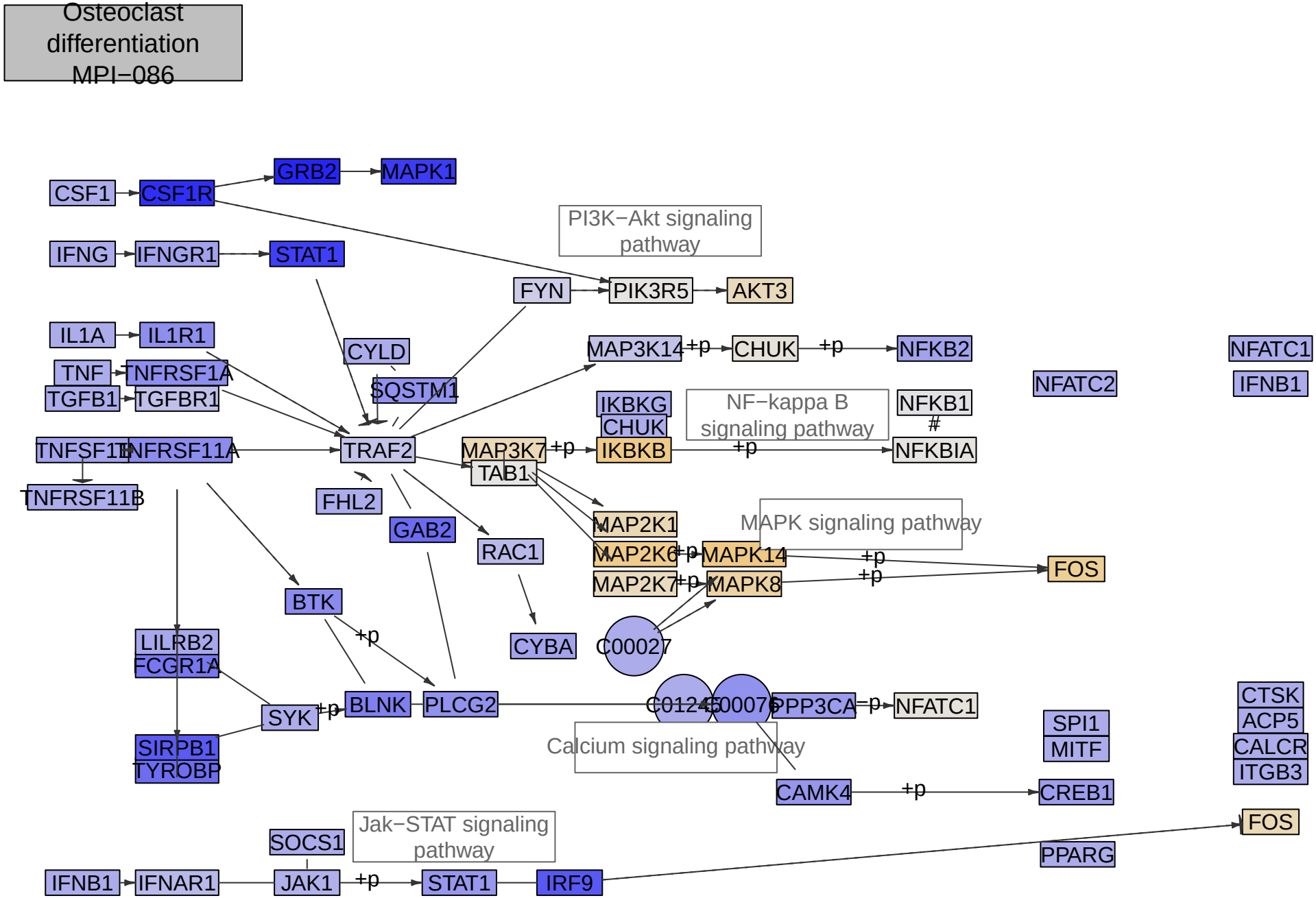
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CHUK
+p
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TRAF2
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IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
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GAB2
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MAPK signaling pathway
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MAPK14
+p
FOS
MAP2K7
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MAPK8
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BTK
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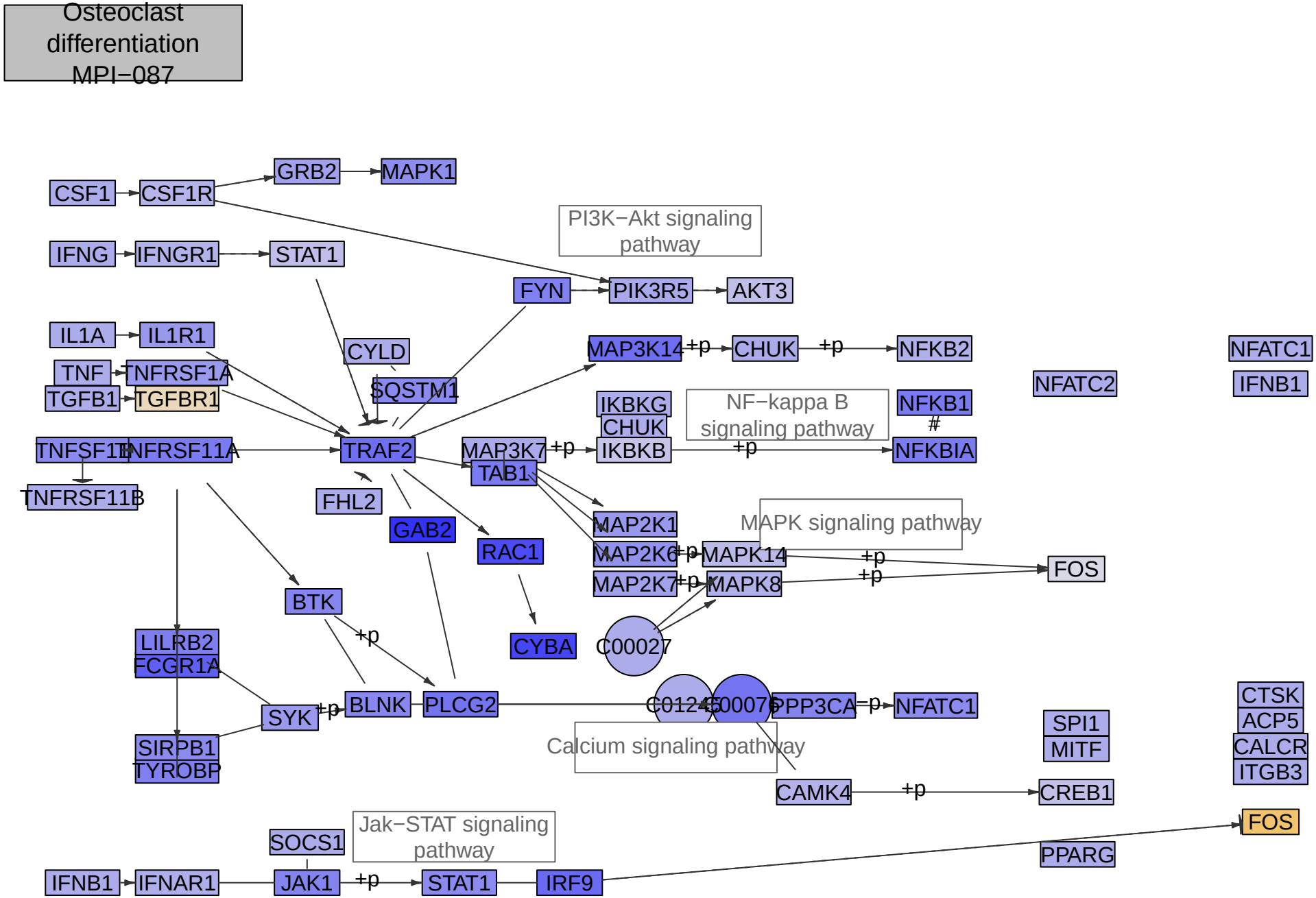
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CHUK
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MAPK8
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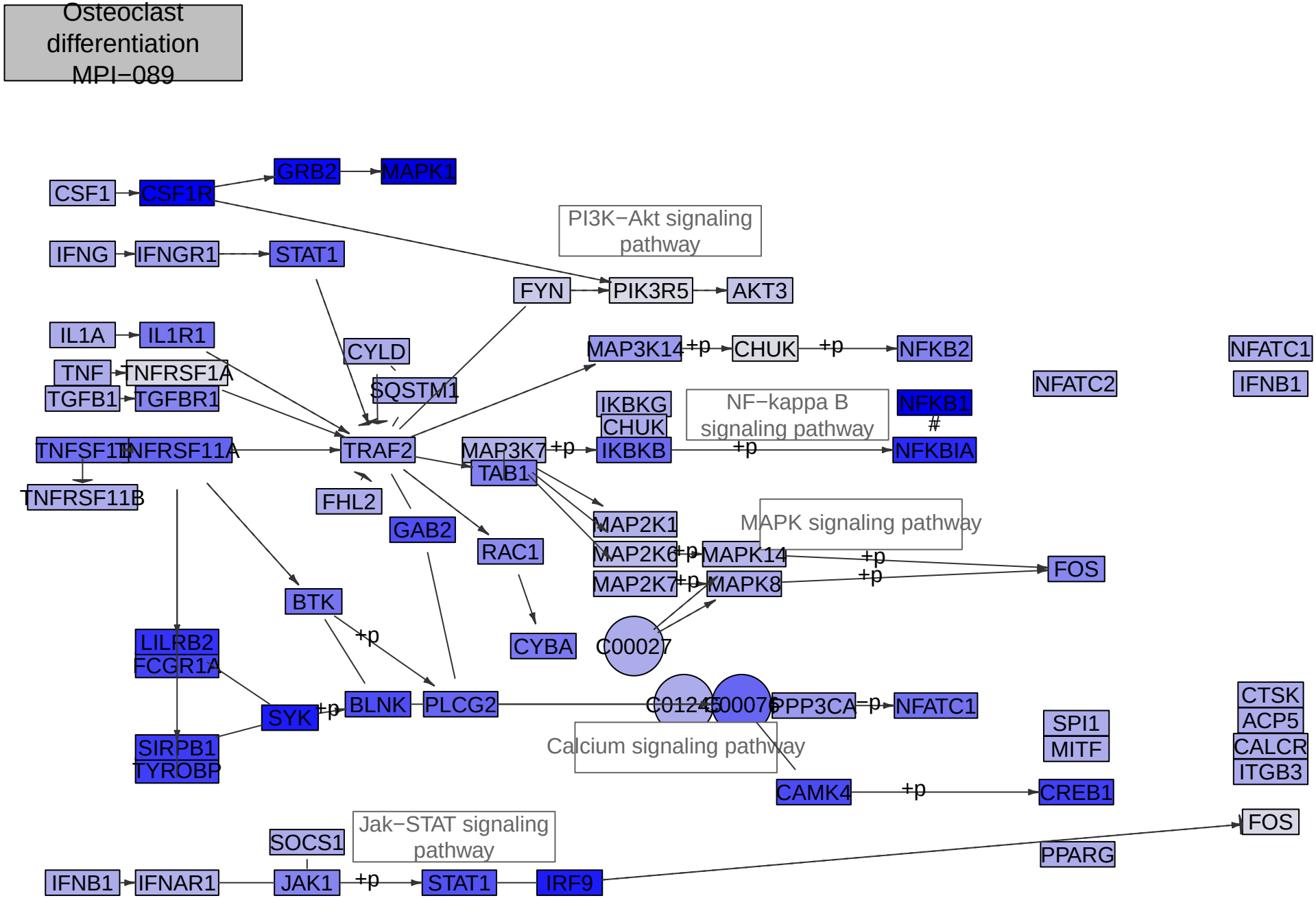
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GAB2
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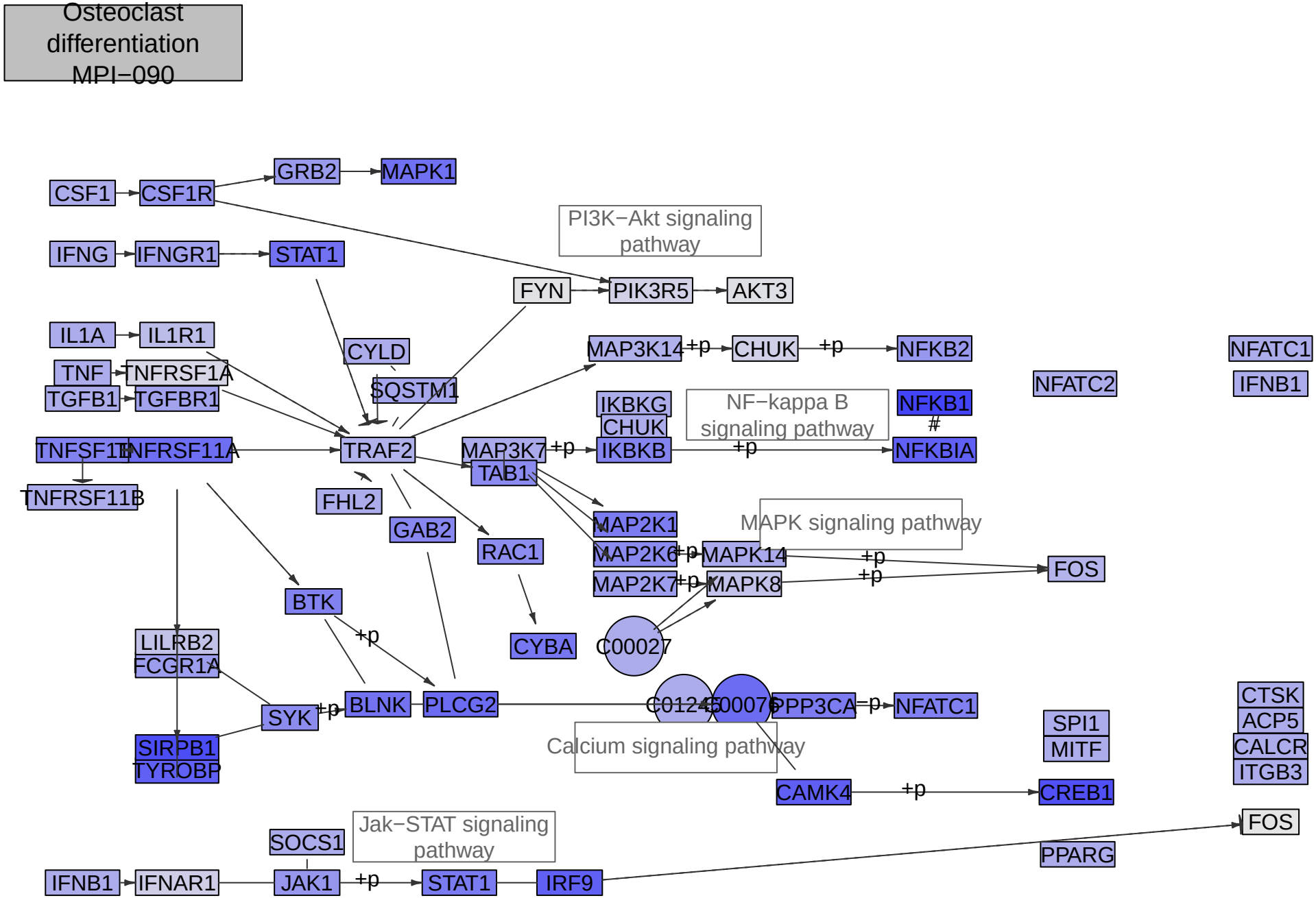
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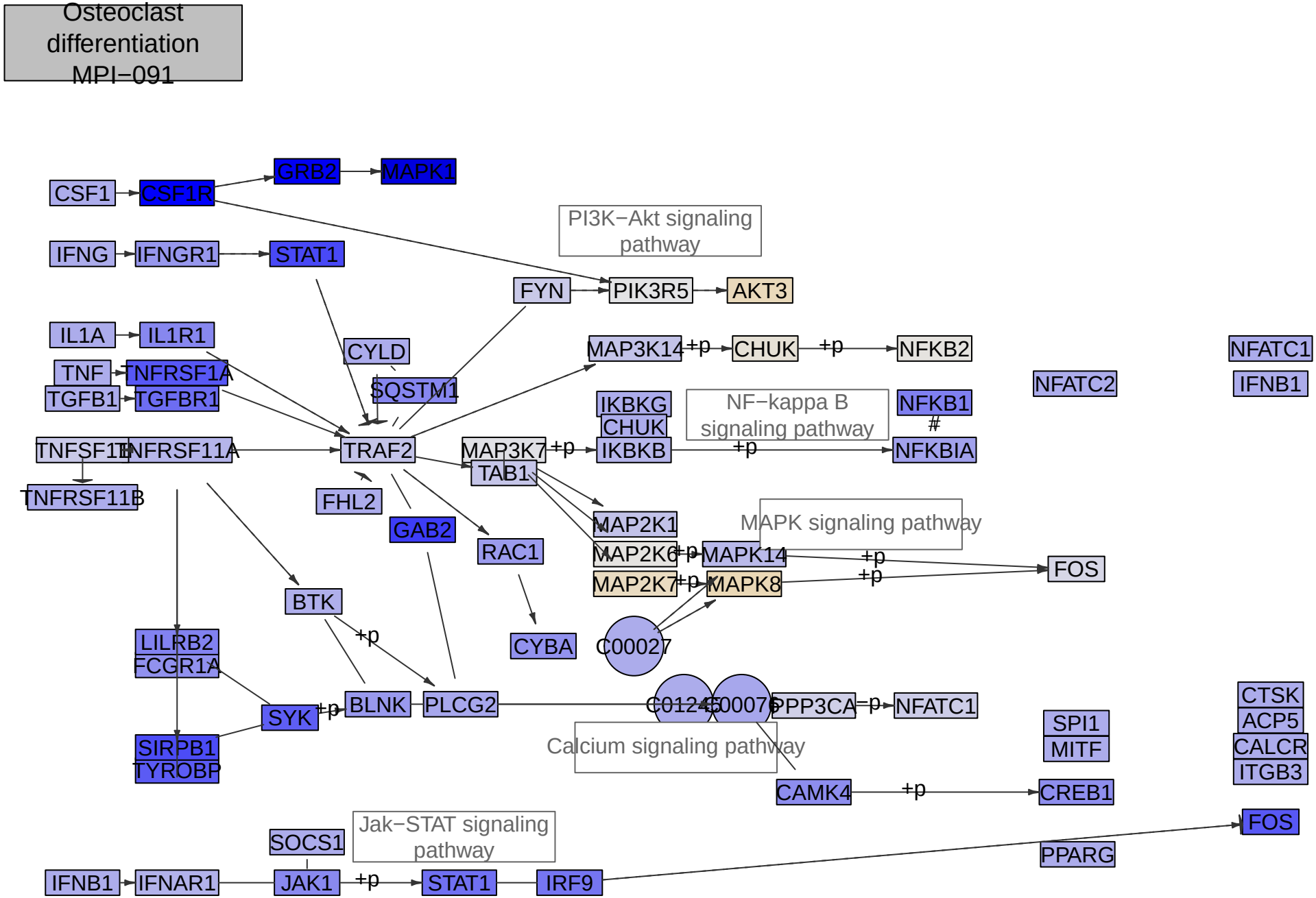
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FHL2
GAB2
MAP2K1
MAPK signaling pathway
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MAP2K6
+p
MAPK14
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MAP2K7
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MAPK8
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BTK
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CYBA
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Calcium signaling pathway
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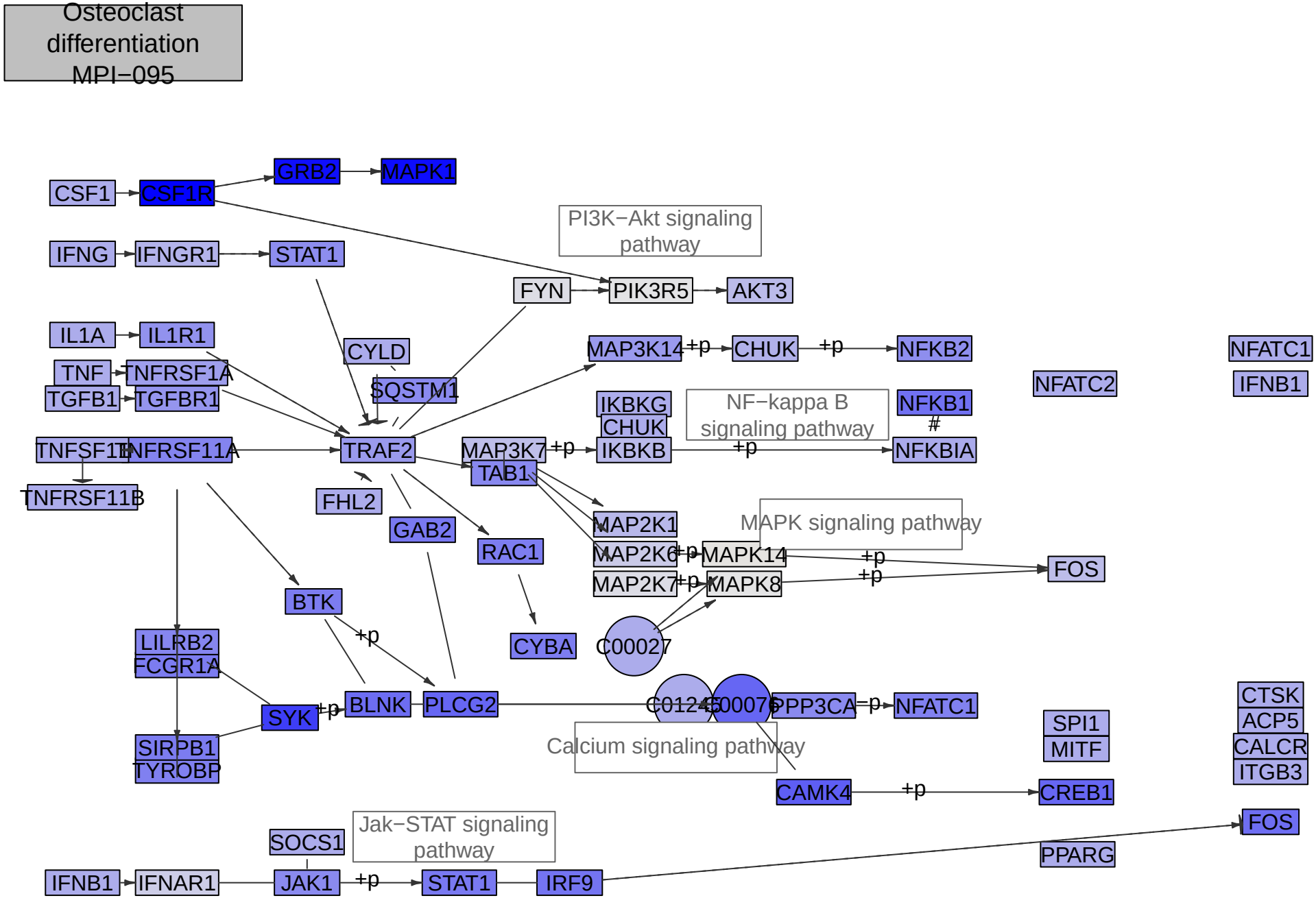
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TNFRSF11A
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MAPK signaling pathway
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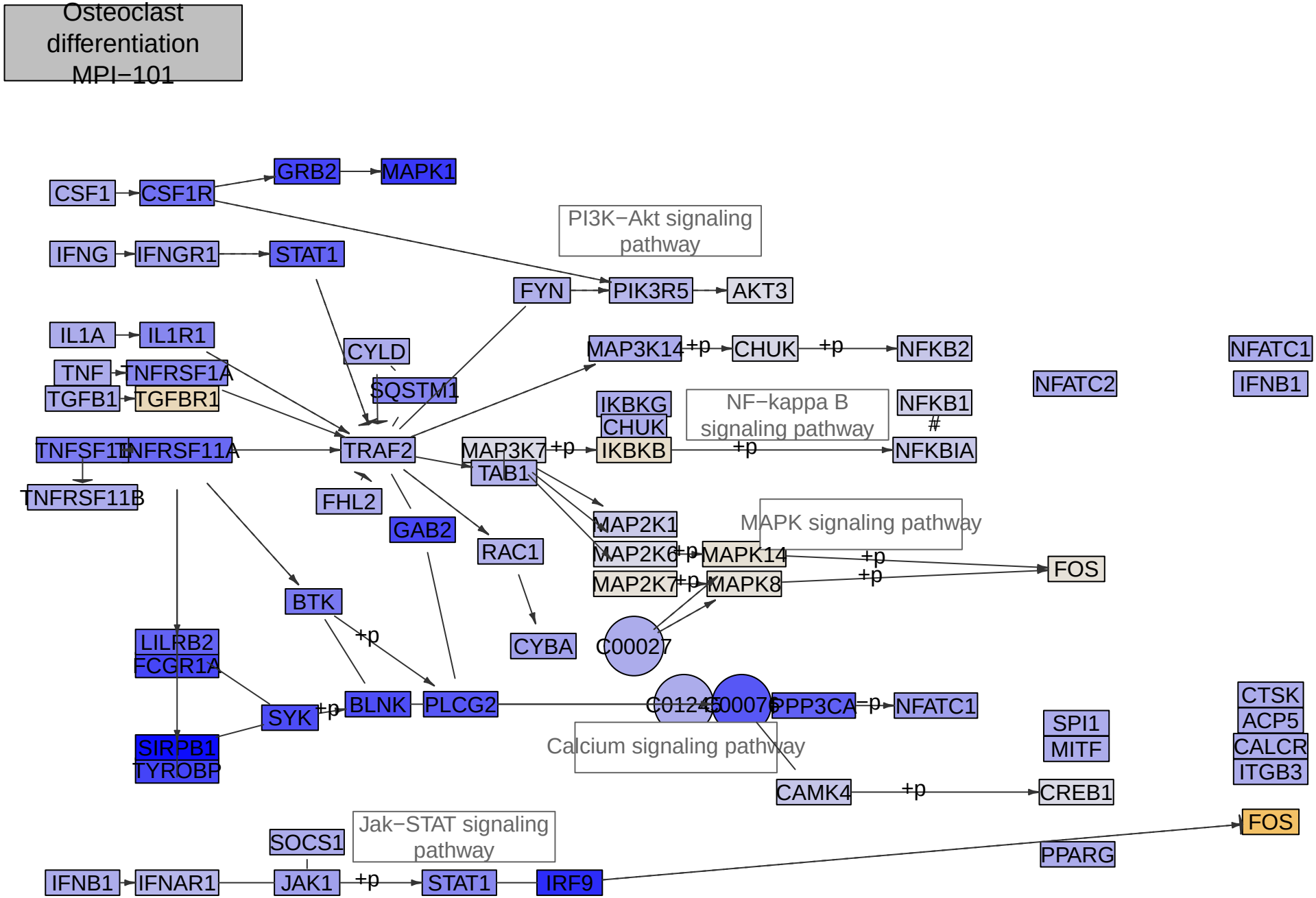
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IKBKB
+p
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TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
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MAP2K6
+p
MAPK14
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FOS
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Calcium signaling pathway
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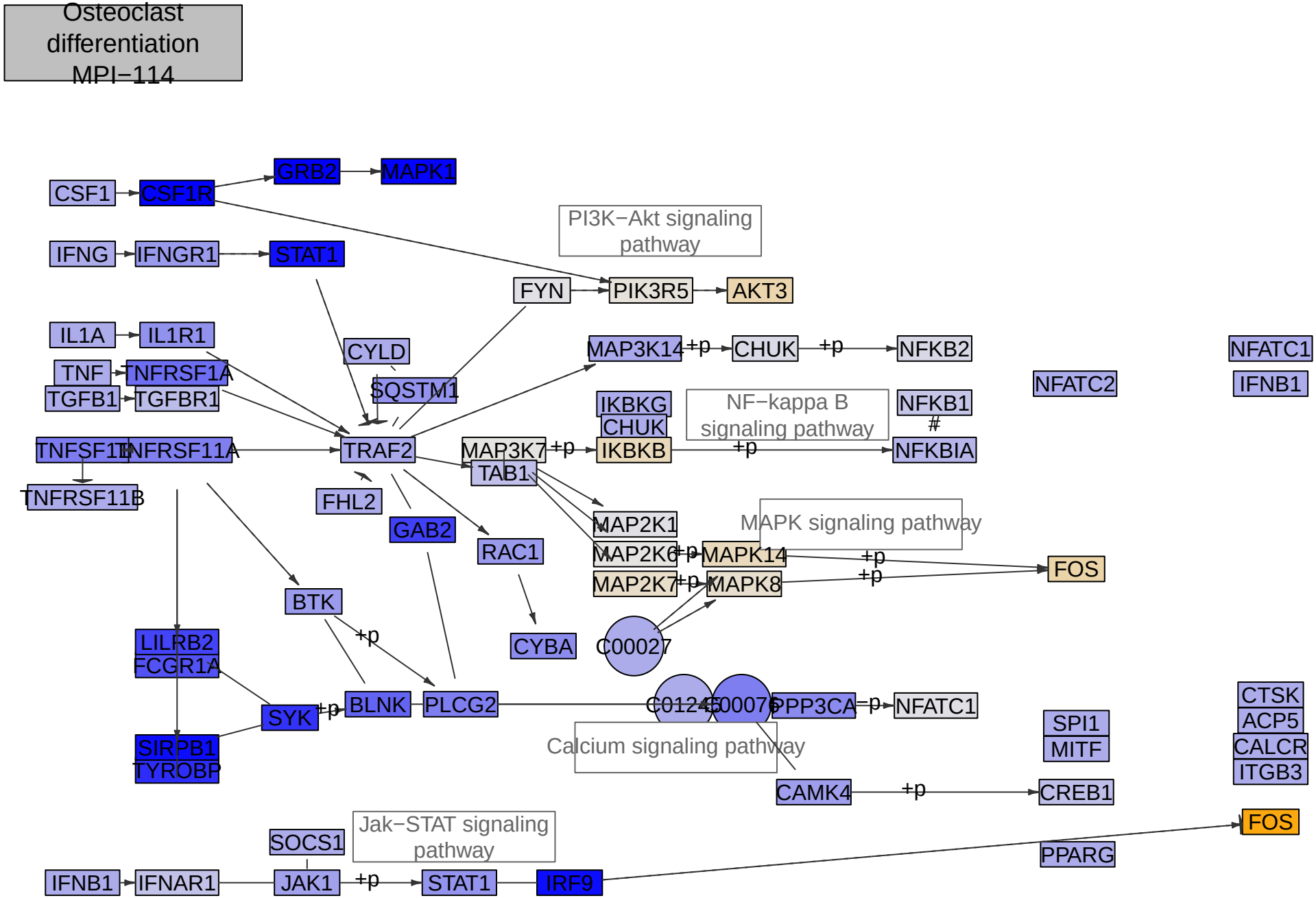
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TGFBR1
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NF−kappa B signaling pathway
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TRAF2
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IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
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MAPK14
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MAP2K7
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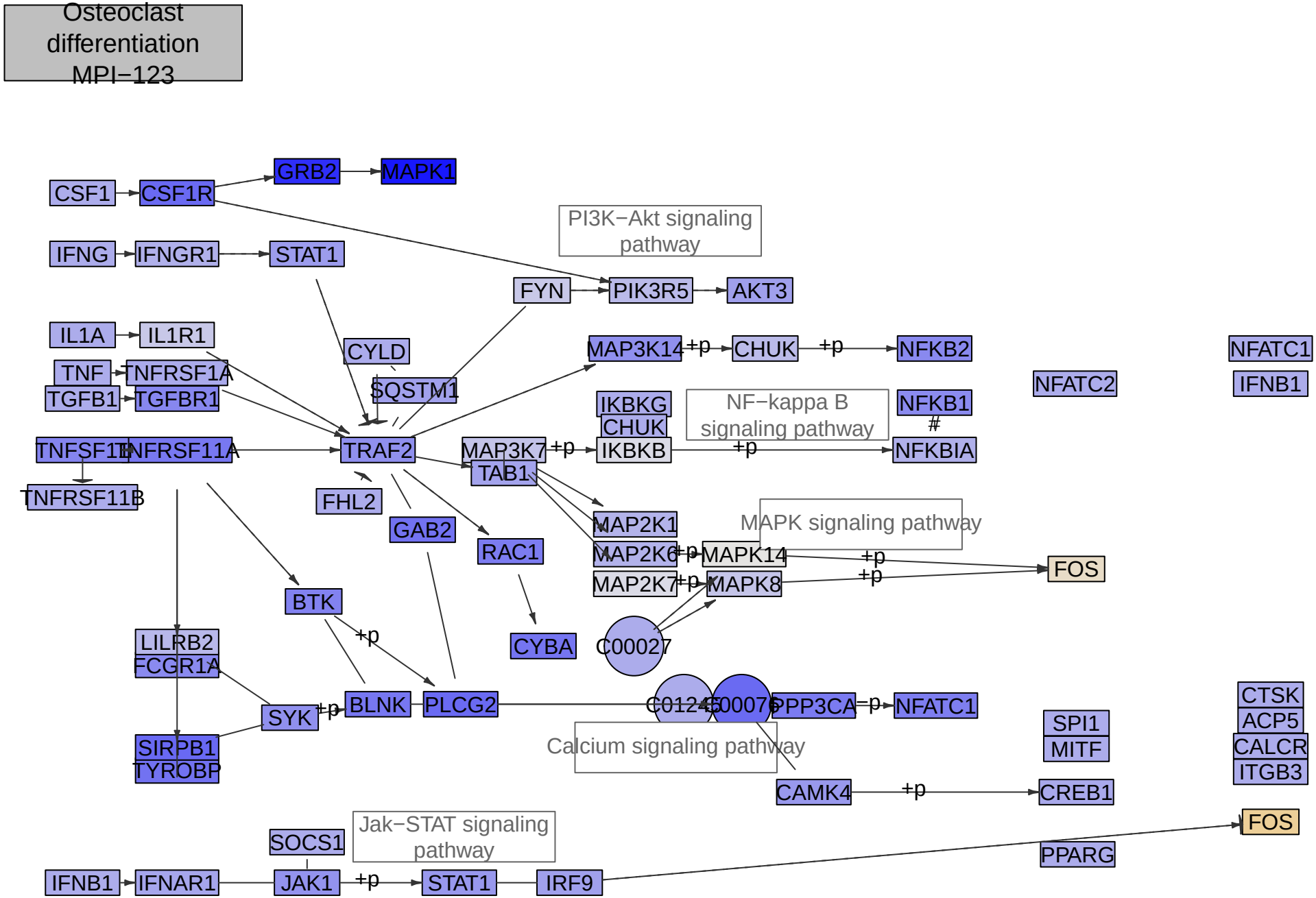
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TNFRSF1A
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IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
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FOS
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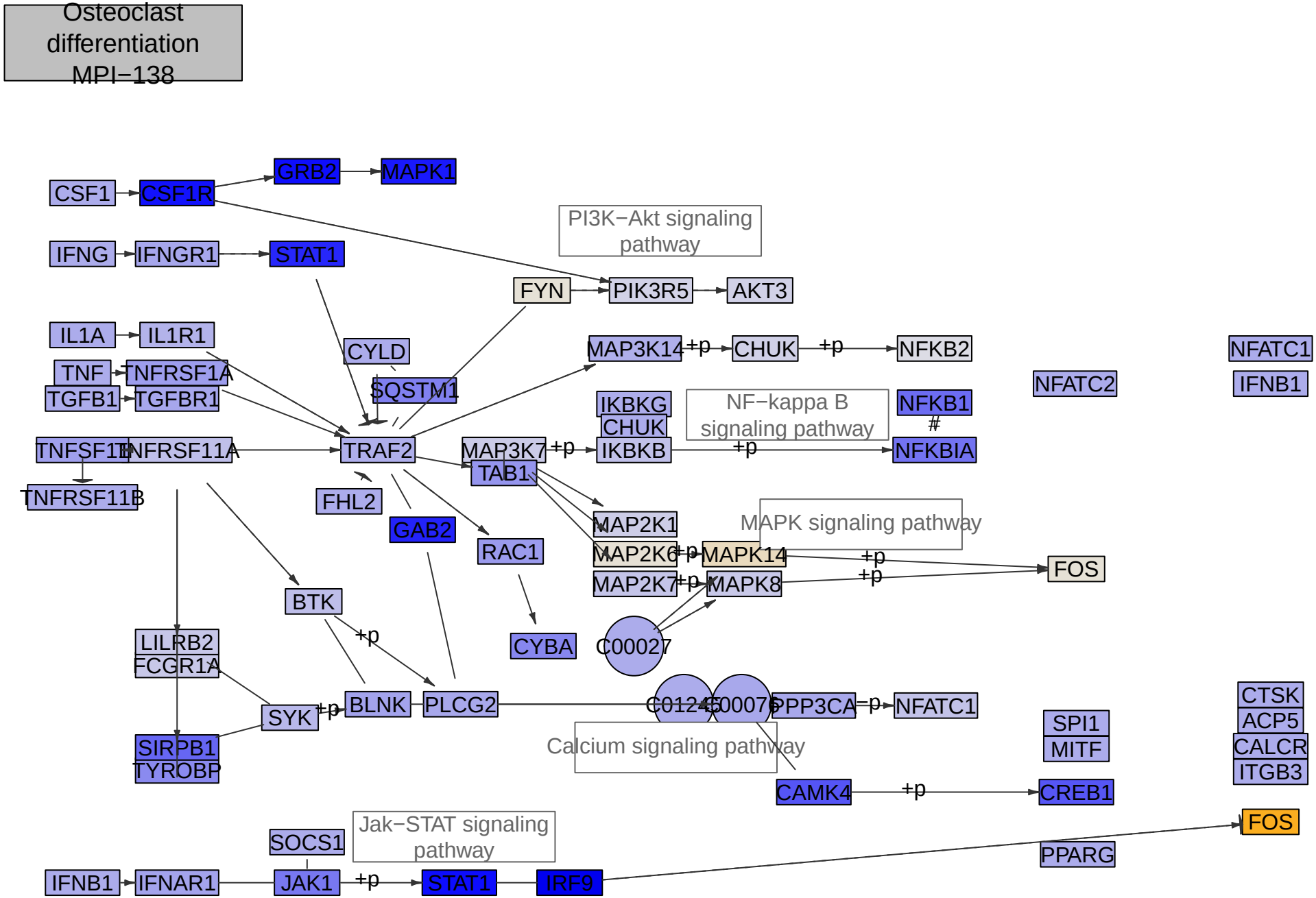
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TNFRSF1A
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TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
MAP2K1
MAPK signaling pathway
GAB2
RAC1
MAP2K6
+p
MAPK14
+p
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
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+p
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SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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FOS
SOCS1
Jak−STAT signaling pathway
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IFNAR1
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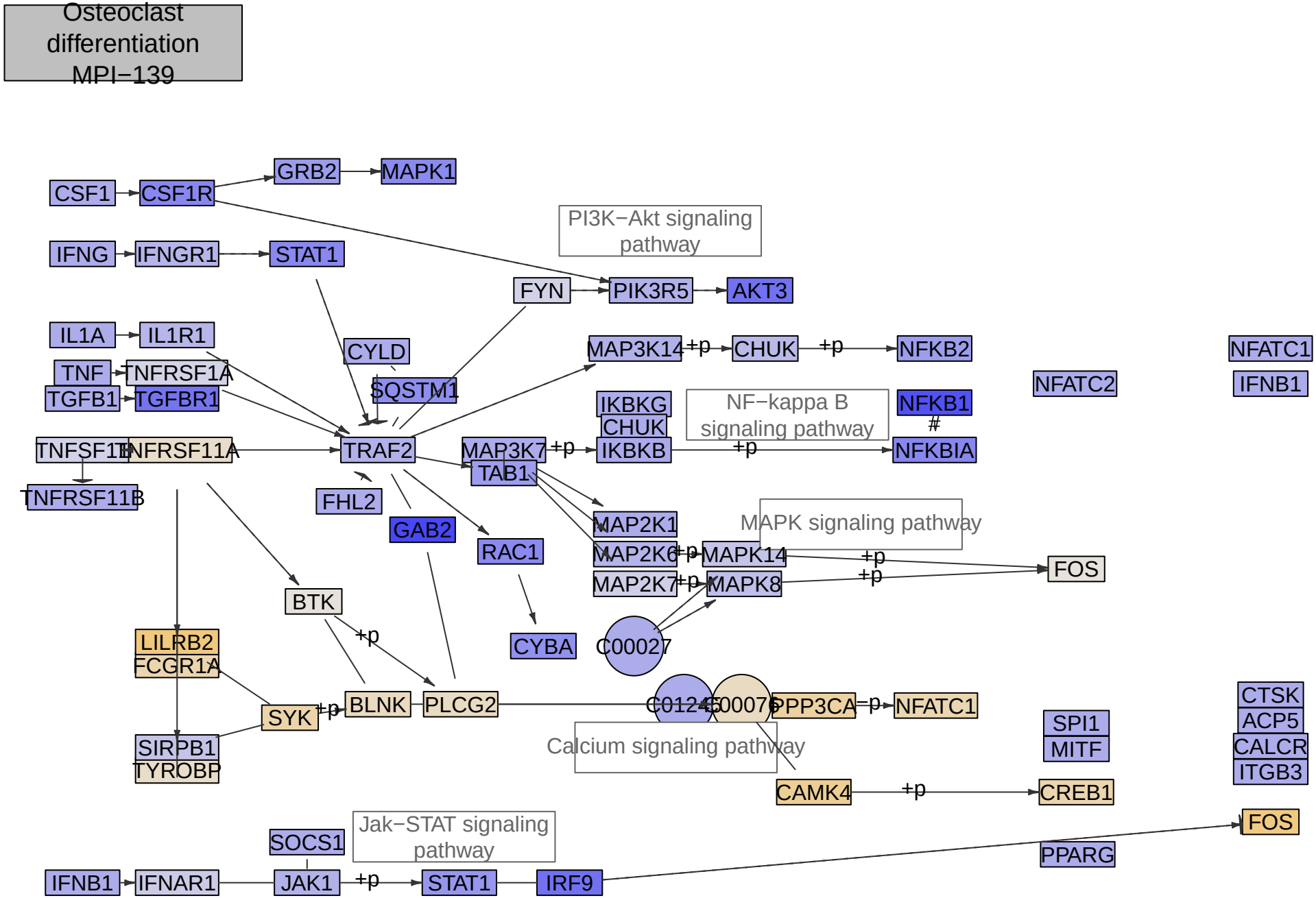
STAT1
IRF9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IL1A
IL1R1
CYLD
MAP3K14
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NFKB2
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SQSTM1
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TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TRAF2
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IKBKB
+p
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TAB1
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FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
=p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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CREB1
SOCS1
Jak−STAT signaling pathway
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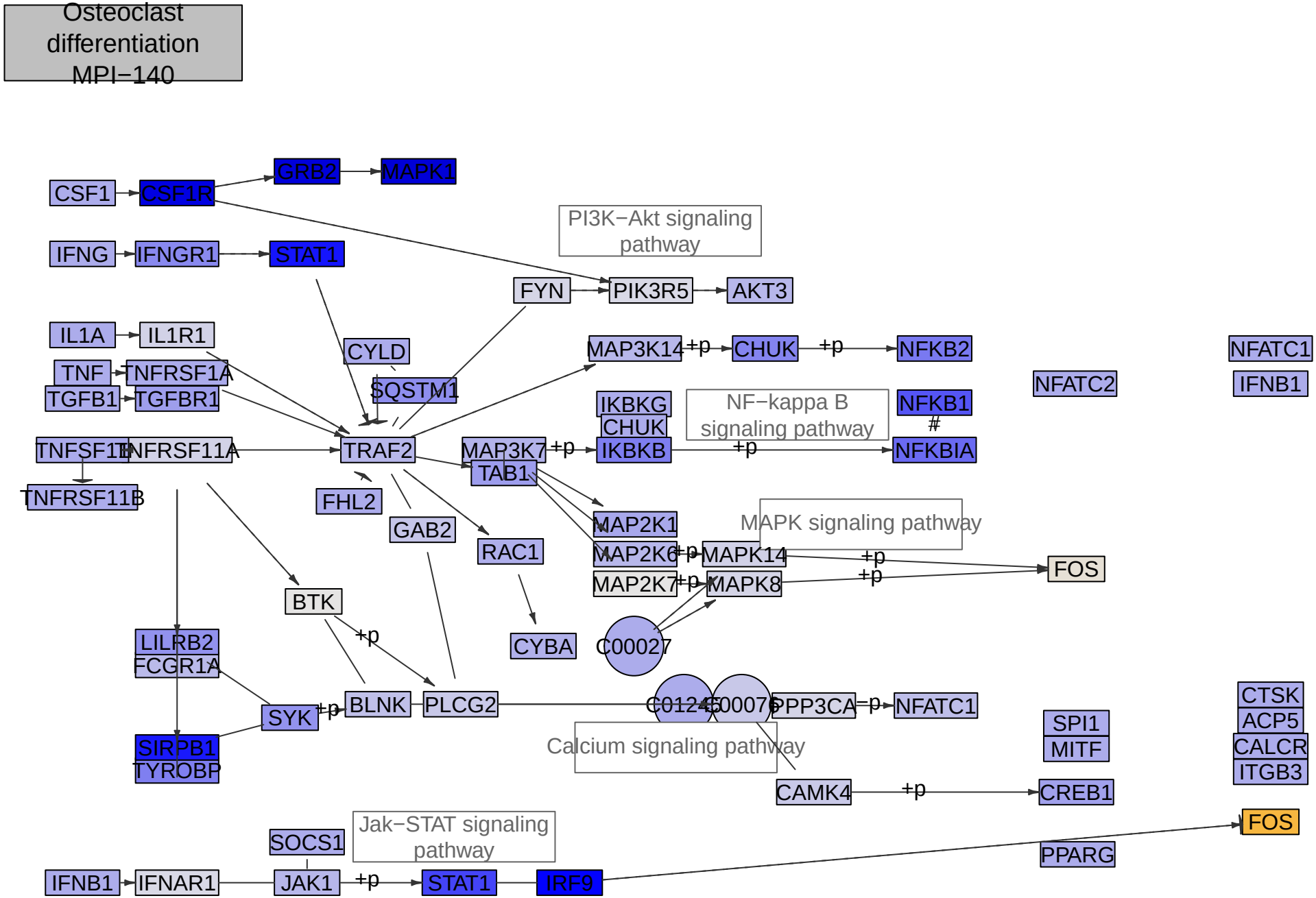
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−140
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PI3K−Akt signaling pathway
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STAT1
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PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
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NFATC1
TNF
TNFRSF1A
SQSTM1
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TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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TRAF2
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TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
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C00076
PPP3CA
+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
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SOCS1
Jak−STAT signaling pathway
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PPARG
IFNB1
IFNAR1
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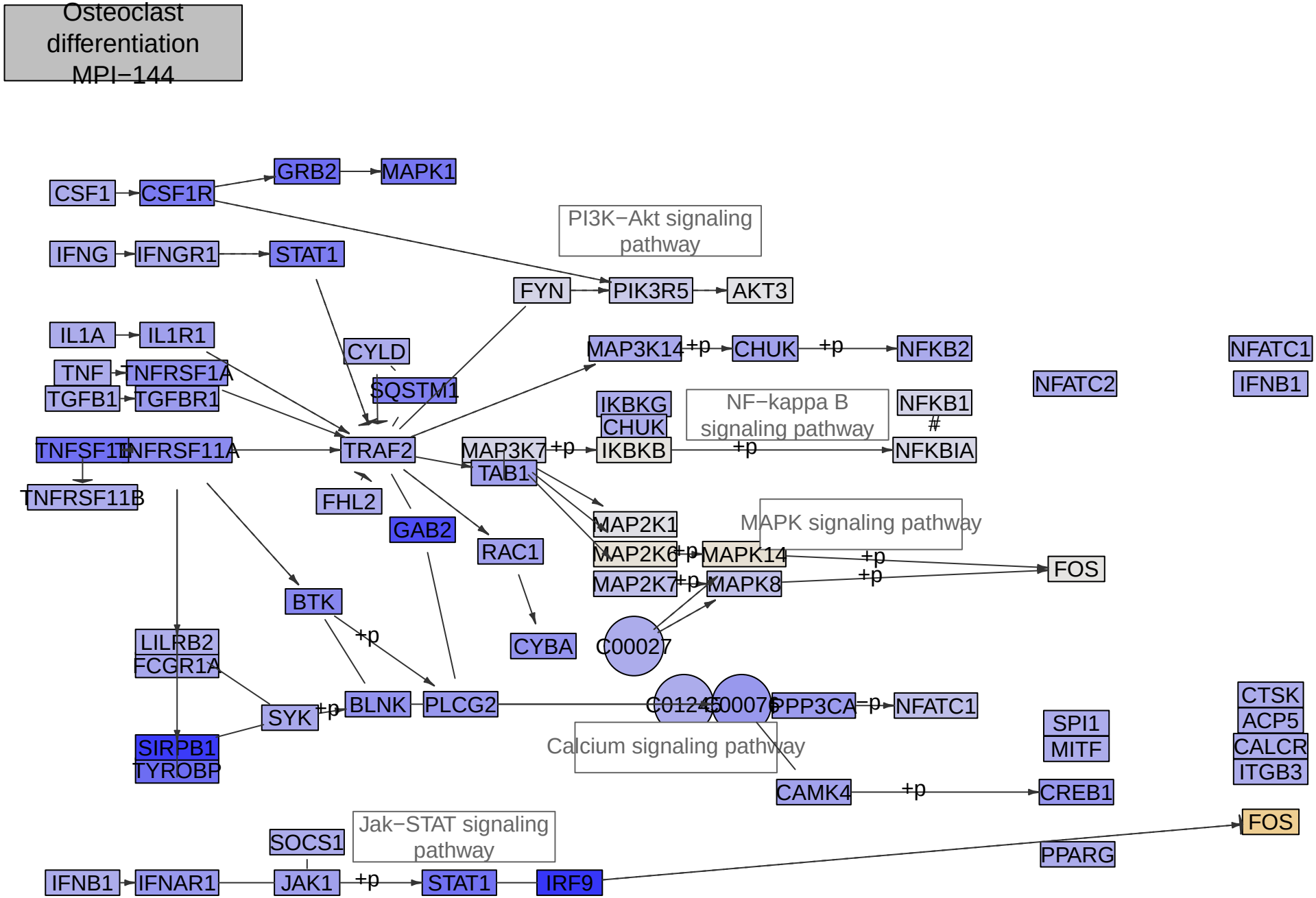
STAT1
IRF9


Osteoclast differentiation MPI−144
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FYN
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AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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TRAF2
MAP3K7
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IKBKB
+p
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TAB1
TNFRSF11B
FHL2
MAP2K1
MAPK signaling pathway
GAB2
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
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NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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SOCS1
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IFNAR1
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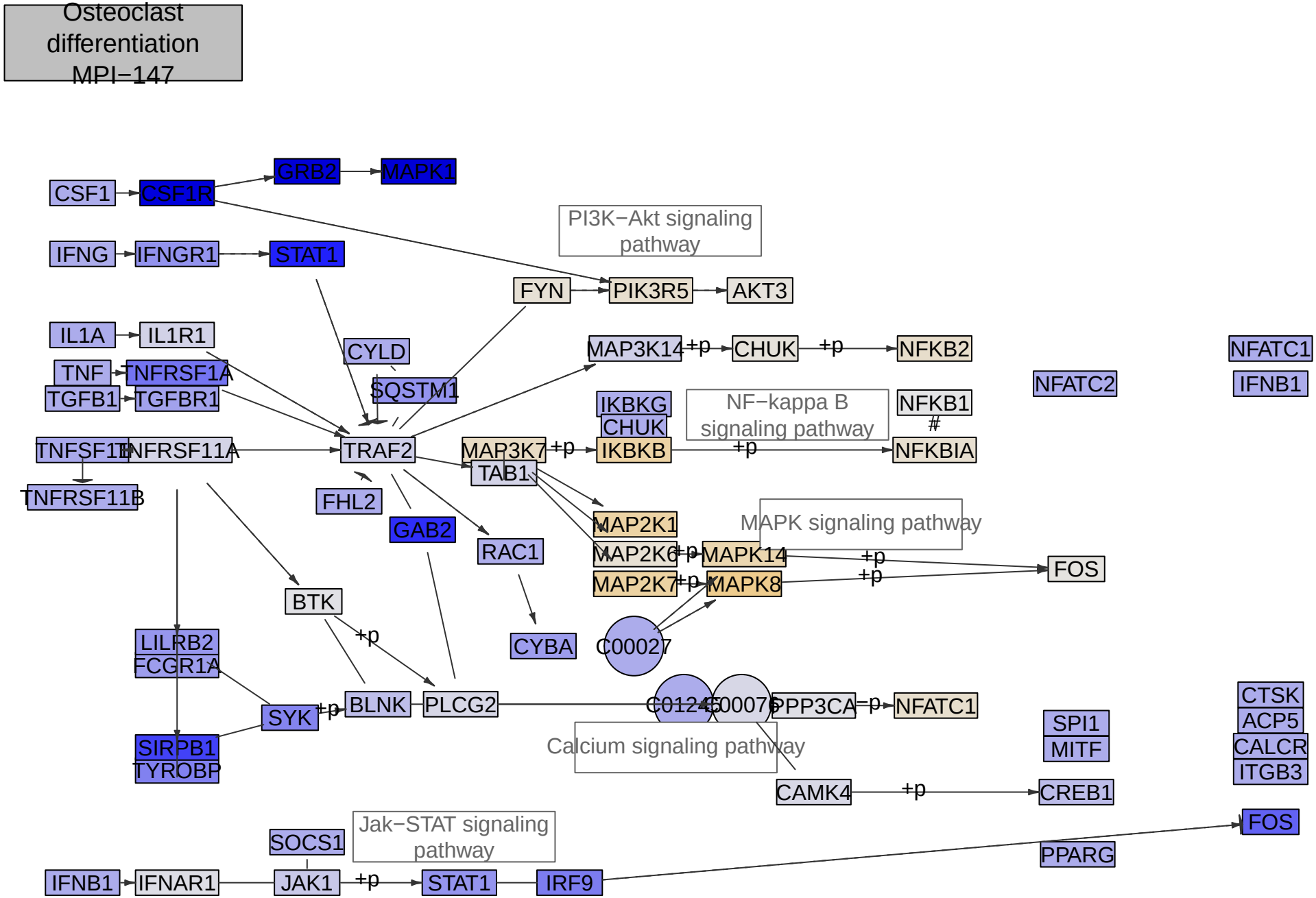
+p
STAT1
IRF9


Osteoclast differentiation MPI−147
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PI3K−Akt signaling pathway
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STAT1
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PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
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+p
BLNK
PLCG2
C01245
C00076
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+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
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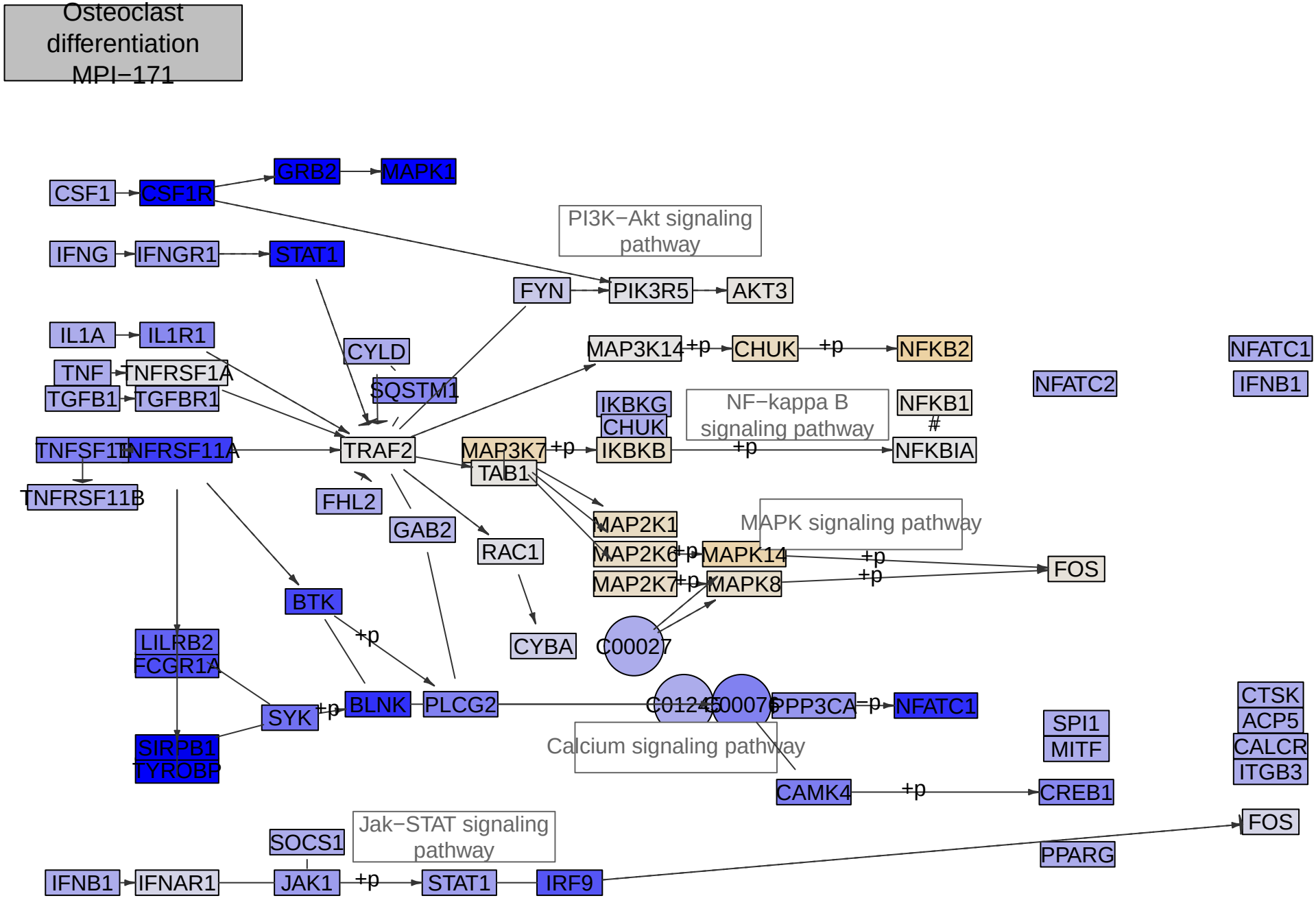
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AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
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+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
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CREB1
SOCS1
Jak−STAT signaling pathway
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PPARG
IFNB1
IFNAR1
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+p
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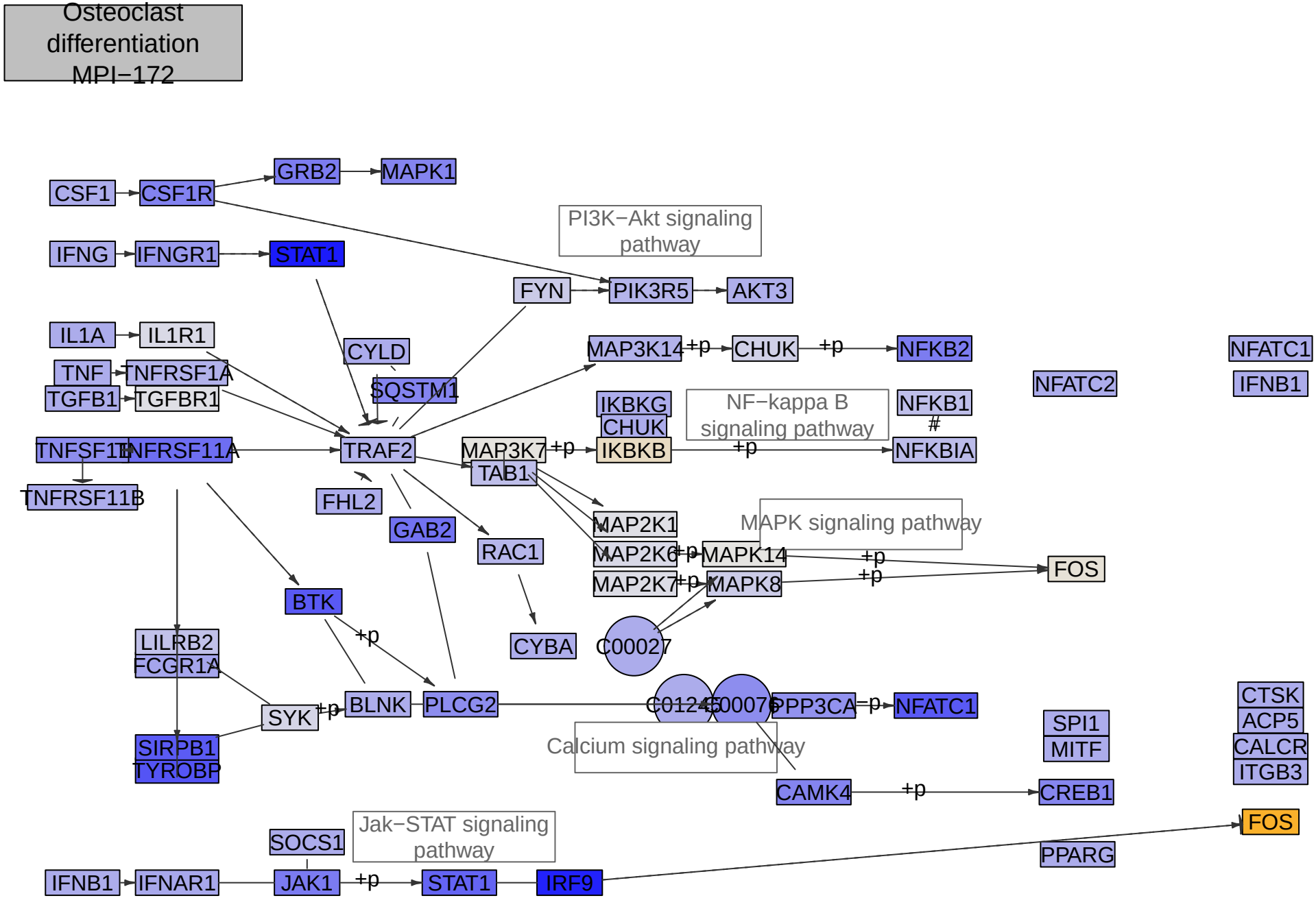
IRF9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AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
MAP2K1
MAPK signaling pathway
GAB2
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
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SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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CREB1
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SOCS1
Jak−STAT signaling pathway
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IFNB1
IFNAR1
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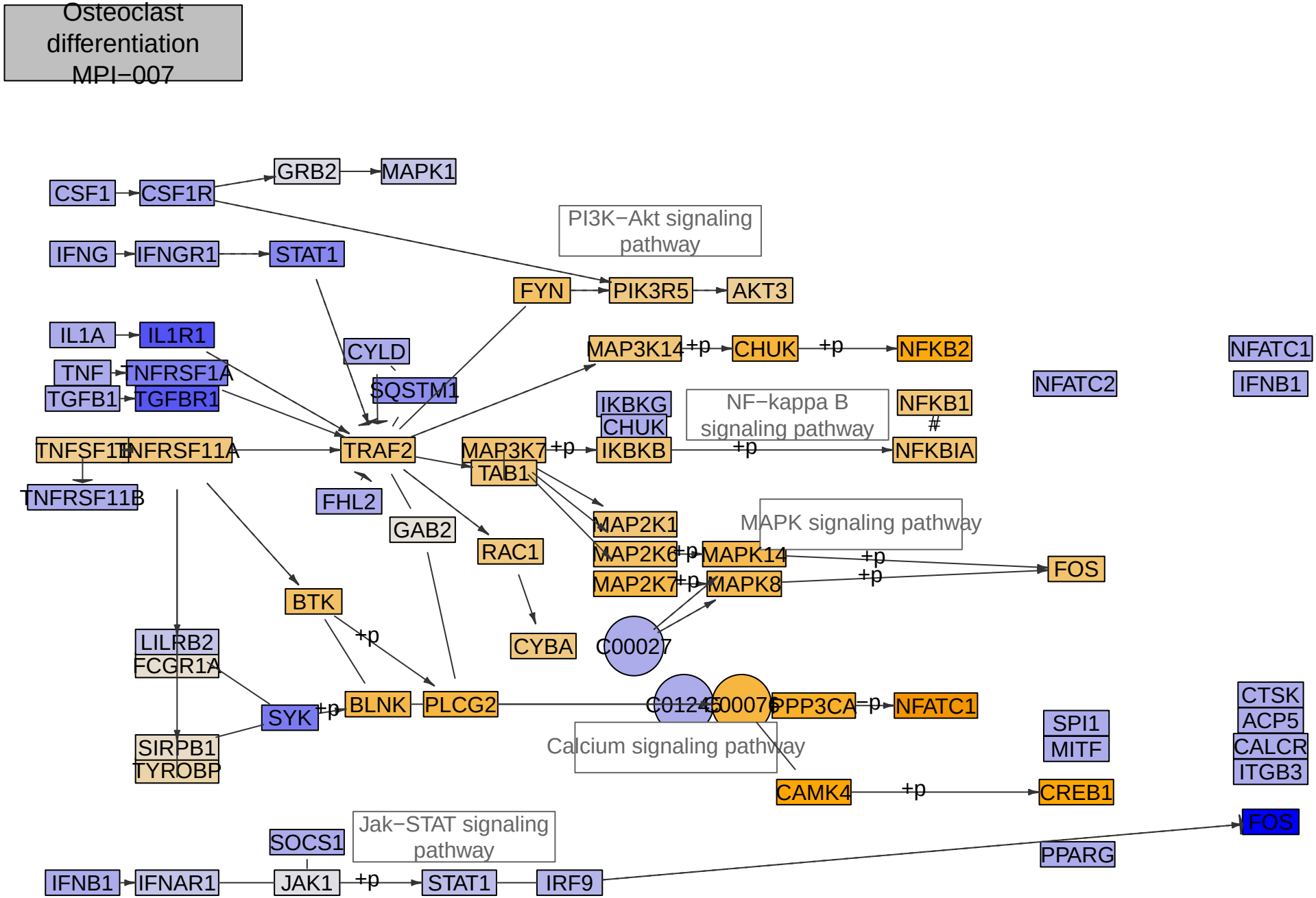
STAT1
IRF9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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
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SOCS1
Jak−STAT signaling pathway
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IFNB1
IFNAR1
JAK1
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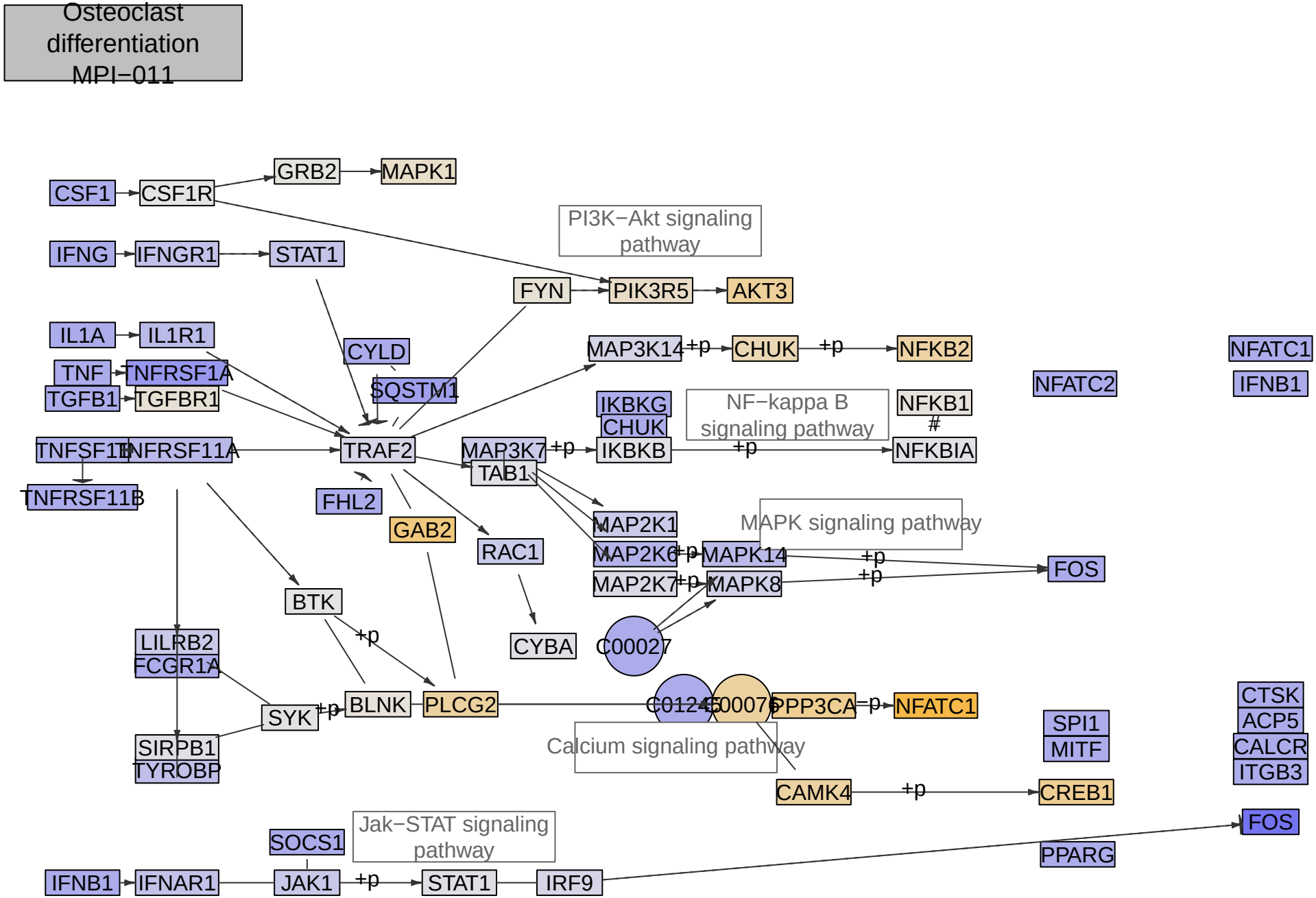
STAT1
IRF9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FYN
PIK3R5
AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
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BLNK
PLCG2
C01245
C00076
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+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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SOCS1
Jak−STAT signaling pathway
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IFNB1
IFNAR1
JAK1
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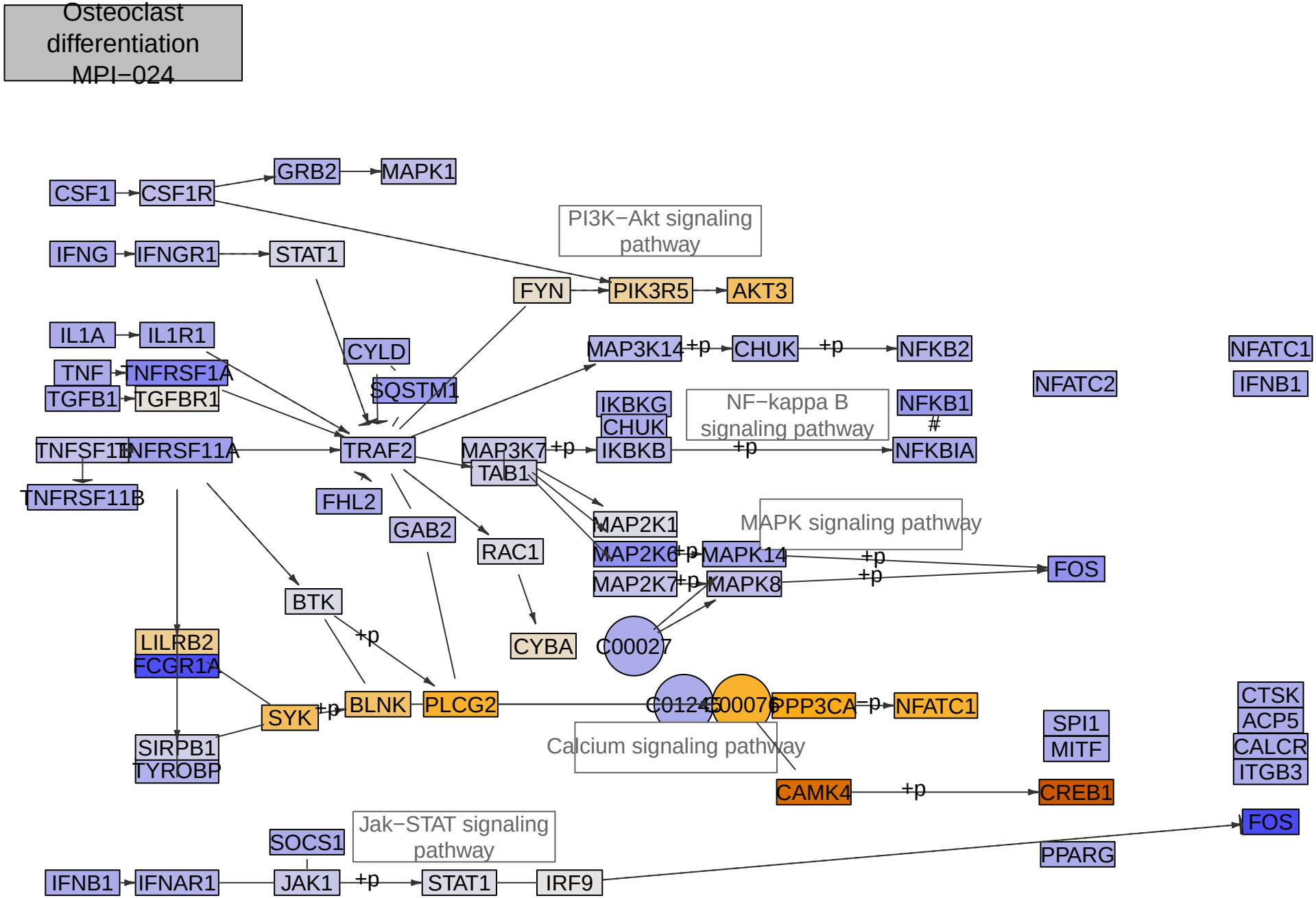
STAT1
IRF9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CHUK
+p
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NFATC1
TNF
TNFRSF1A
SQSTM1
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IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
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BLNK
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CTSK
ACP5
SPI1
MITF
CALCR
ITGB3
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TYROBP
Calcium signaling pathway
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SOCS1
Jak−STAT signaling pathway
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IFNAR1
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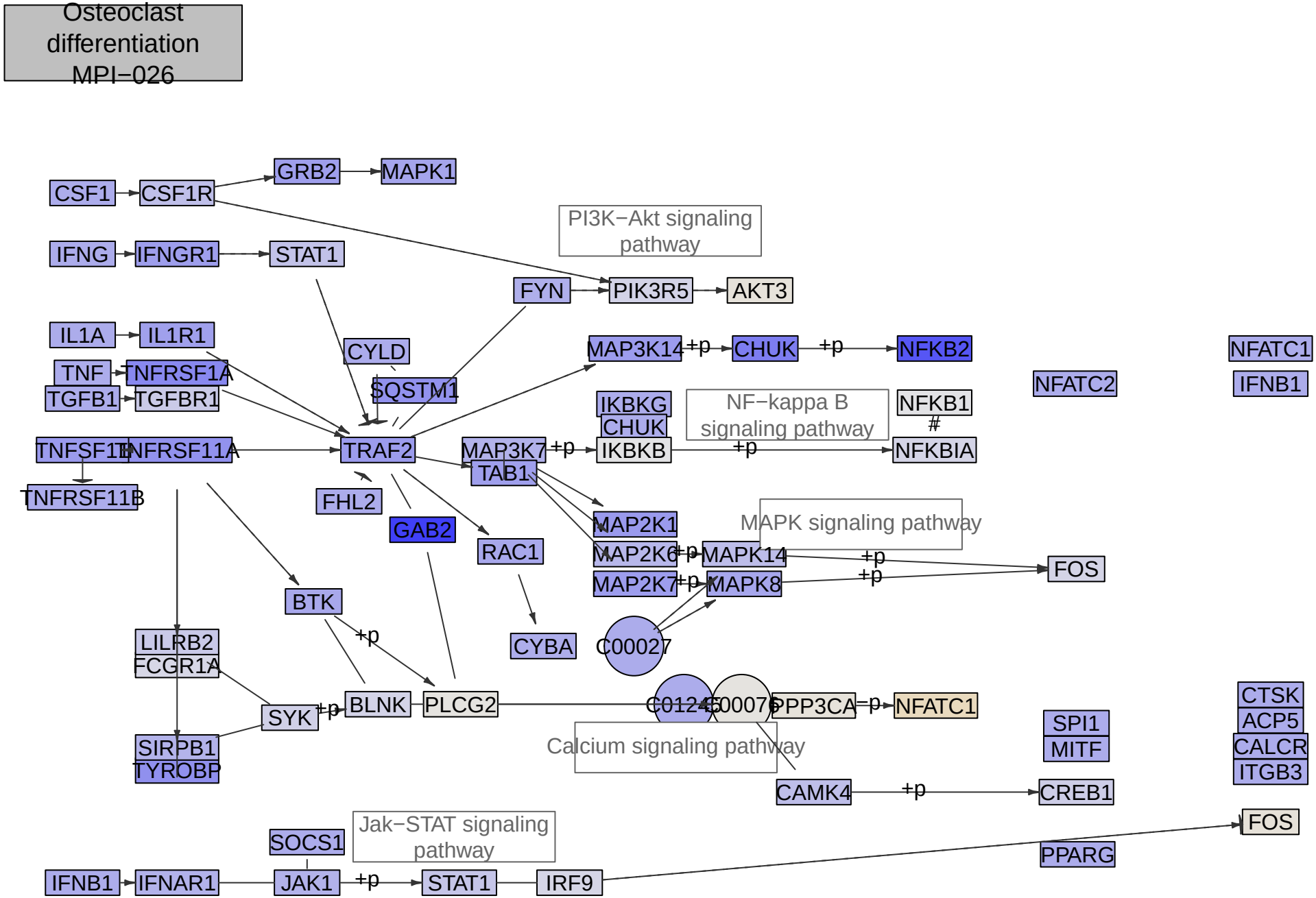
+p
STAT1
IRF9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CHUK
+p
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NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
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MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
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CYBA
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SYK
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SPI1
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Calcium signaling pathway
CALCR
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Jak−STAT signaling pathway
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IFNAR1
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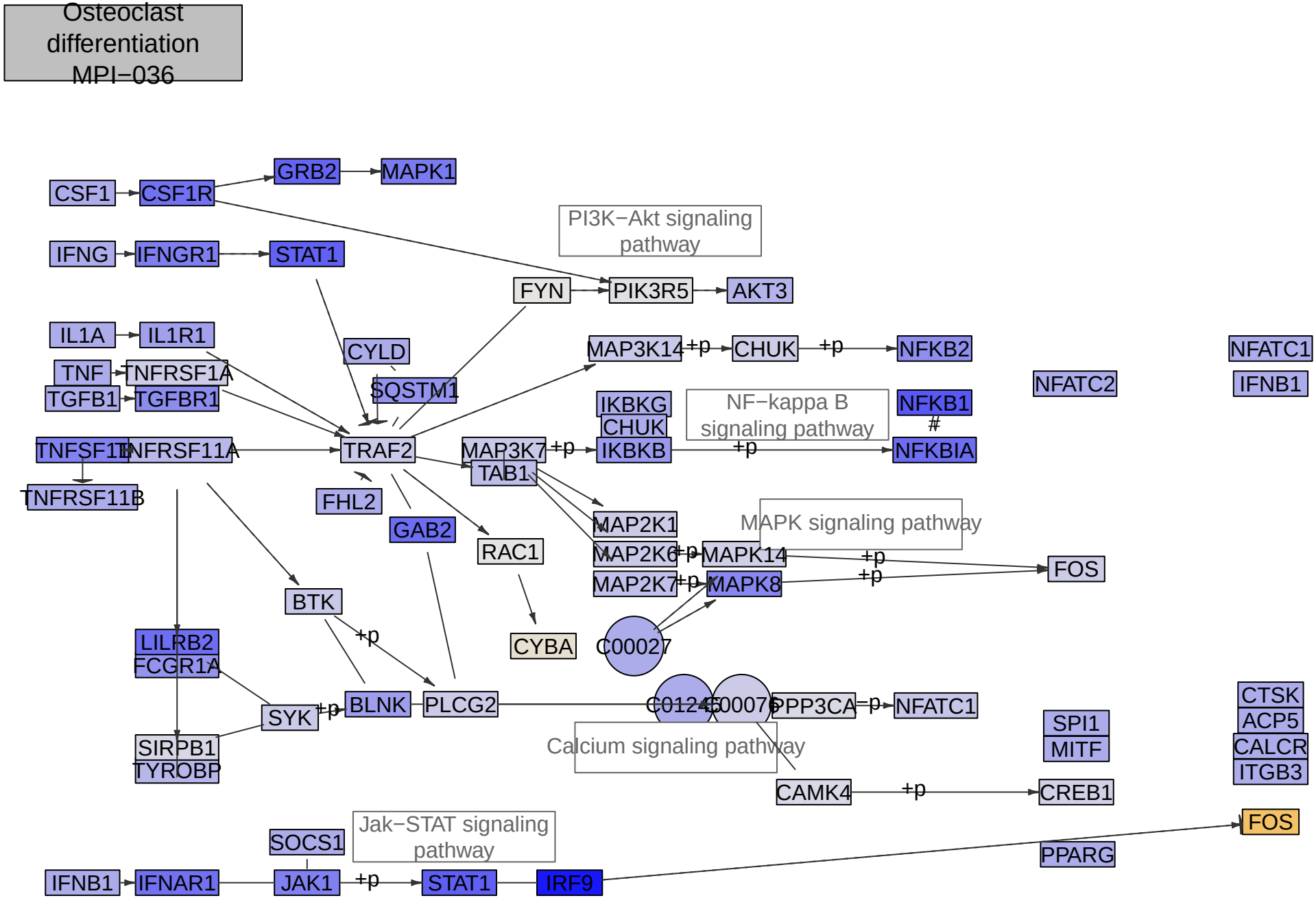
IRF9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CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
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FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
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SIRPB1
TYROBP
Calcium signaling pathway
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MITF
CTSK
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ITGB3
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Jak−STAT signaling pathway
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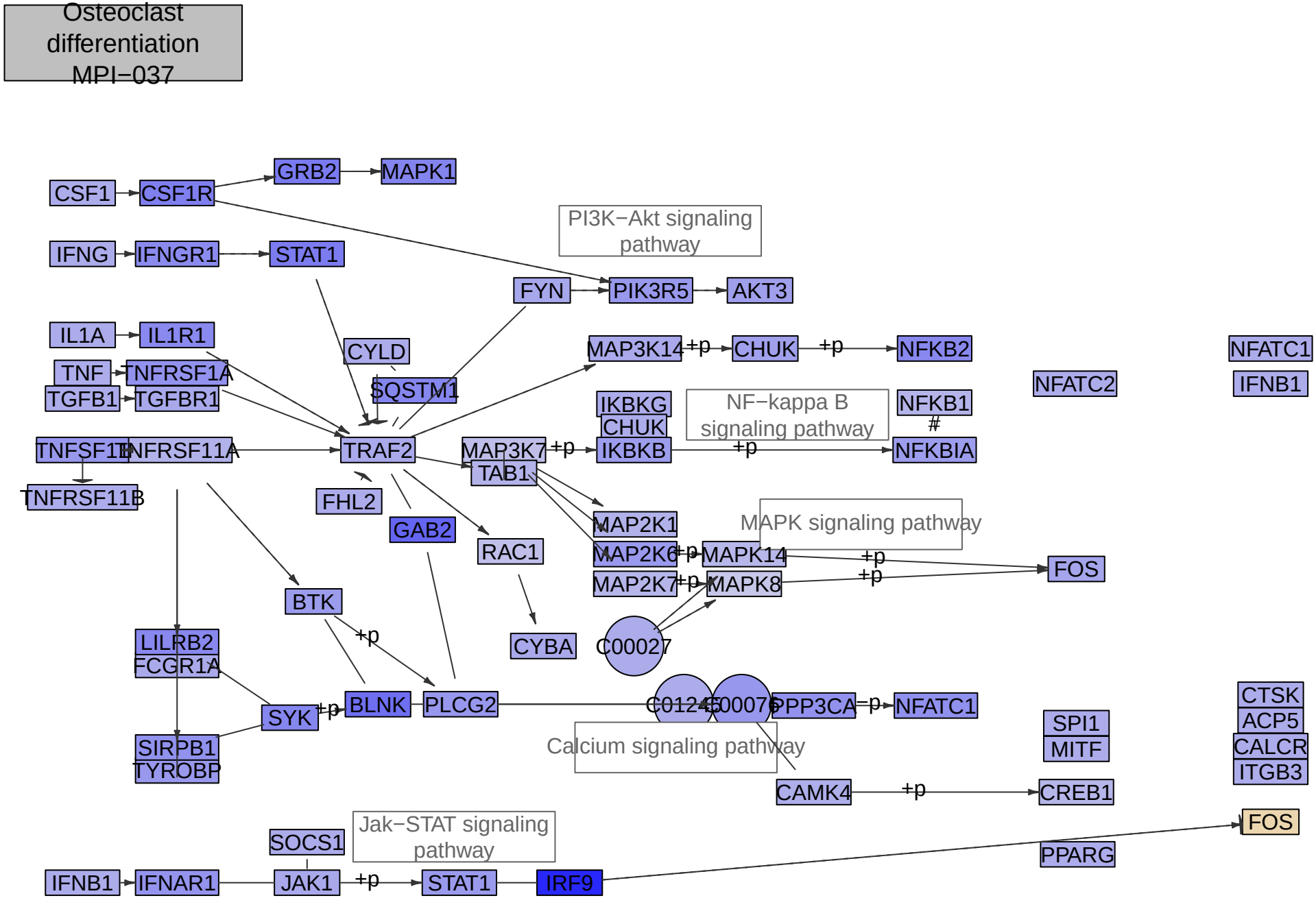
STAT1
IRF9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CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFSF11
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TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
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MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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SOCS1
Jak−STAT signaling pathway
PPARG
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IFNAR1
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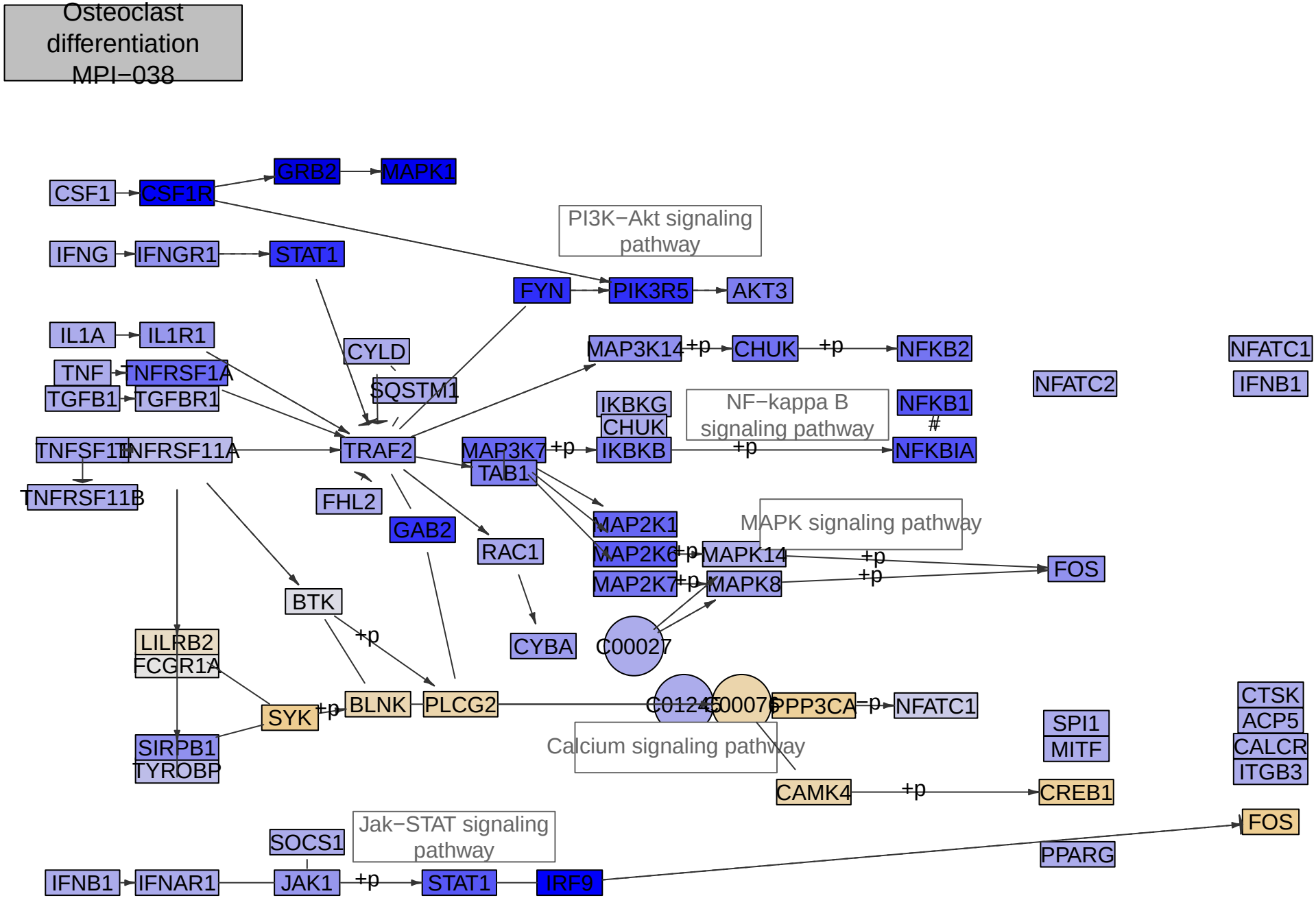
IRF9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CHUK
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TNF
TNFRSF1A
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NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
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BLNK
PLCG2
C01245
C00076
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SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
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CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
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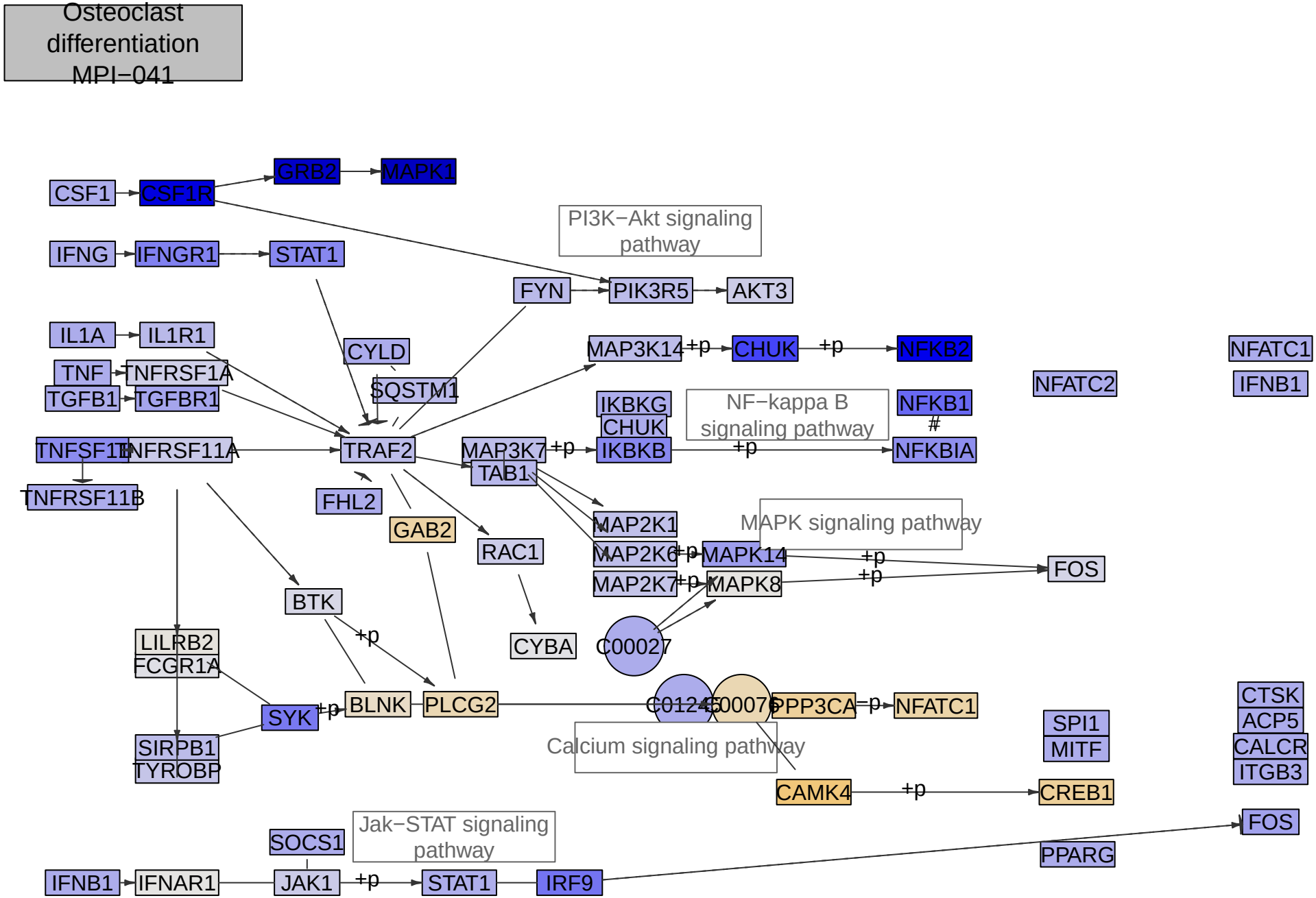
STAT1
IRF9


Osteoclast differentiation MPI−041
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CSF1R
PI3K−Akt signaling pathway
IFNG
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STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
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FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
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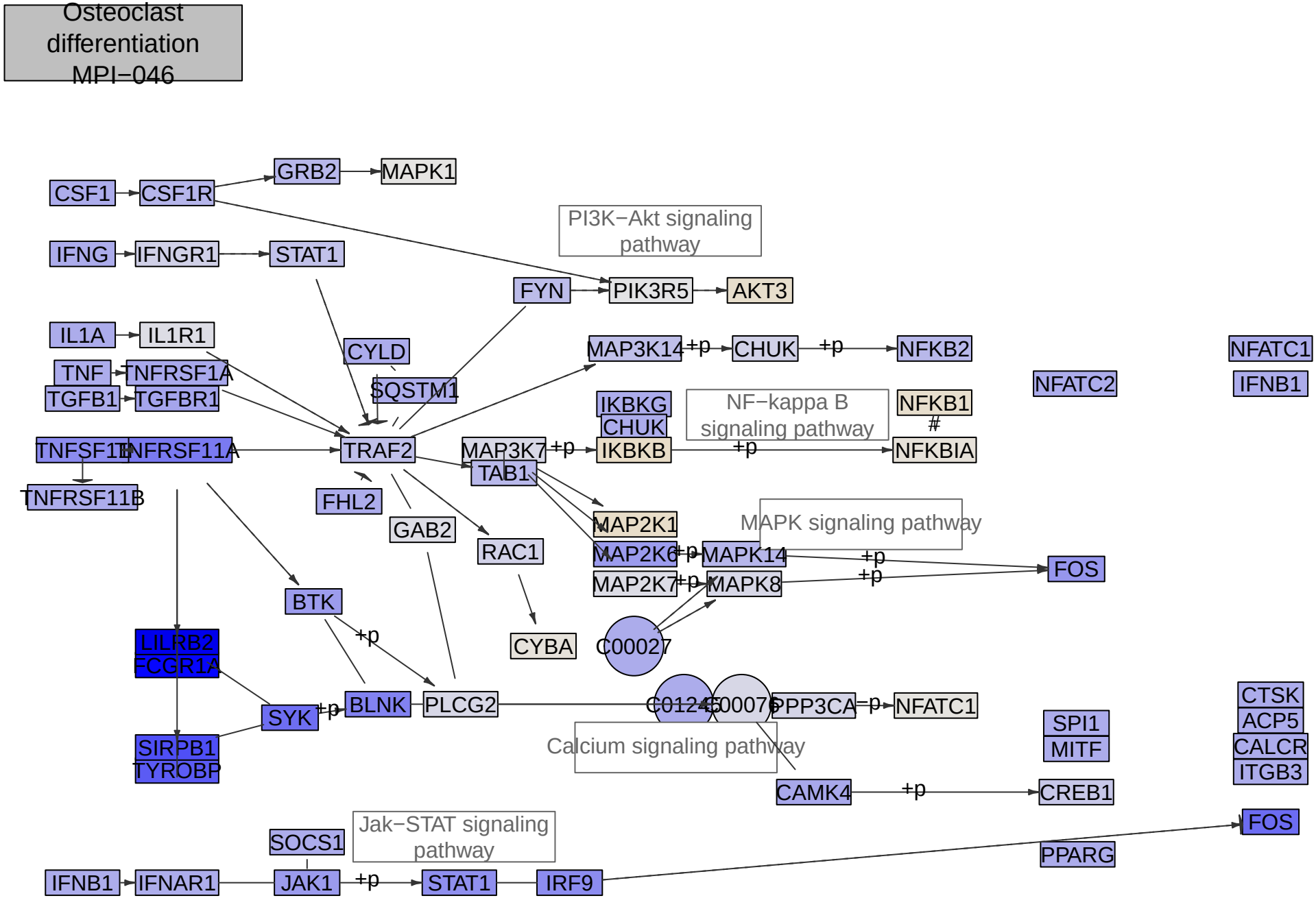
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9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PI3K−Akt signaling pathway
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FYN
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AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
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NFKB2
NFATC1
TNF
TNFRSF1A
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IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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TNFRSF11A
TRAF2
MAP3K7
+p
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+p
NFKBIA
TAB1
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FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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Jak−STAT signaling pathway
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IFNAR1
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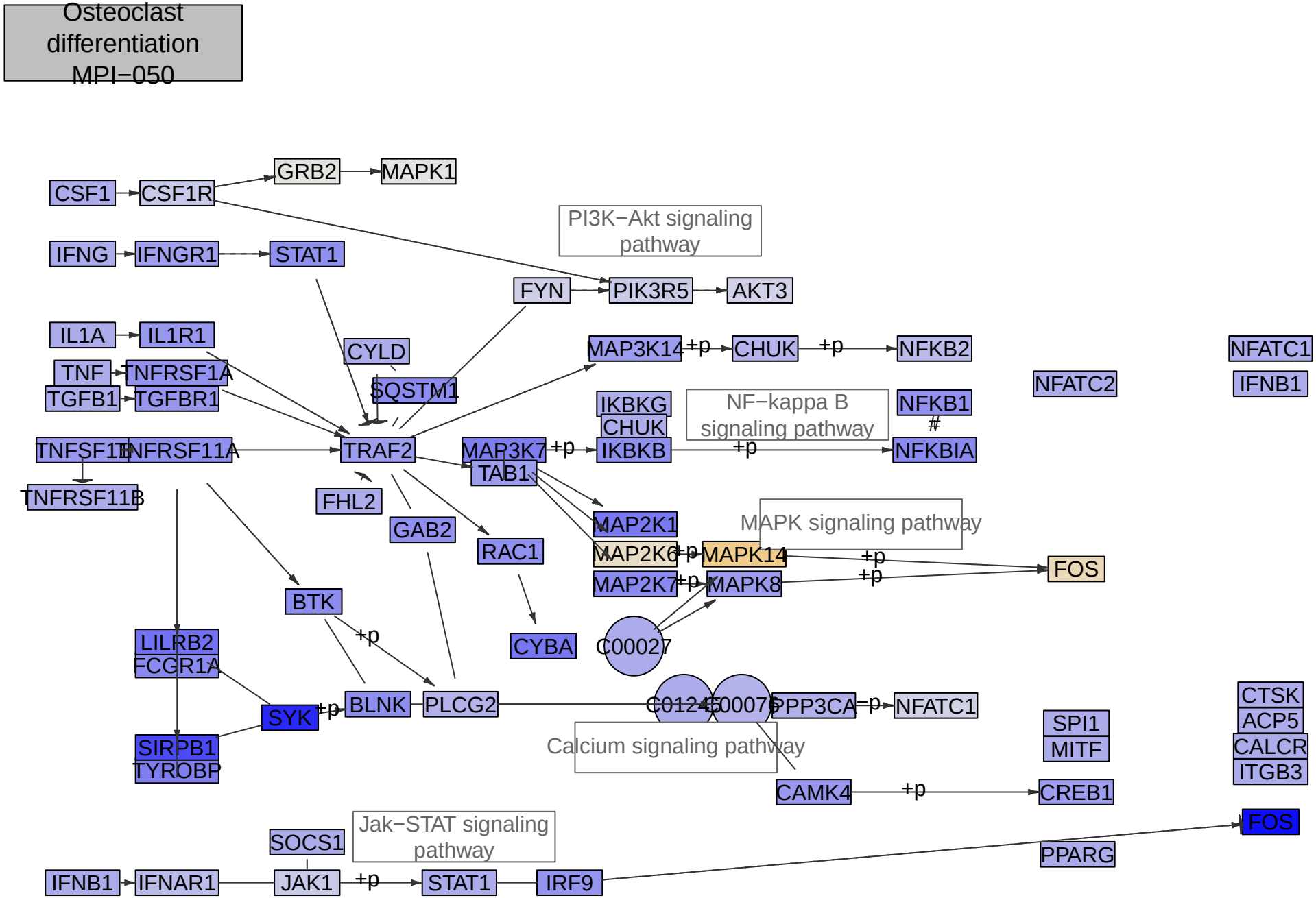
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PI3K−Akt signaling pathway
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STAT1
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AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
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TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
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MAPK14
+p
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MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
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MITF
CTSK
ACP5
CALCR
ITGB3
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Jak−STAT signaling pathway
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PPARG
IFNB1
IFNAR1
JAK1
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STAT1
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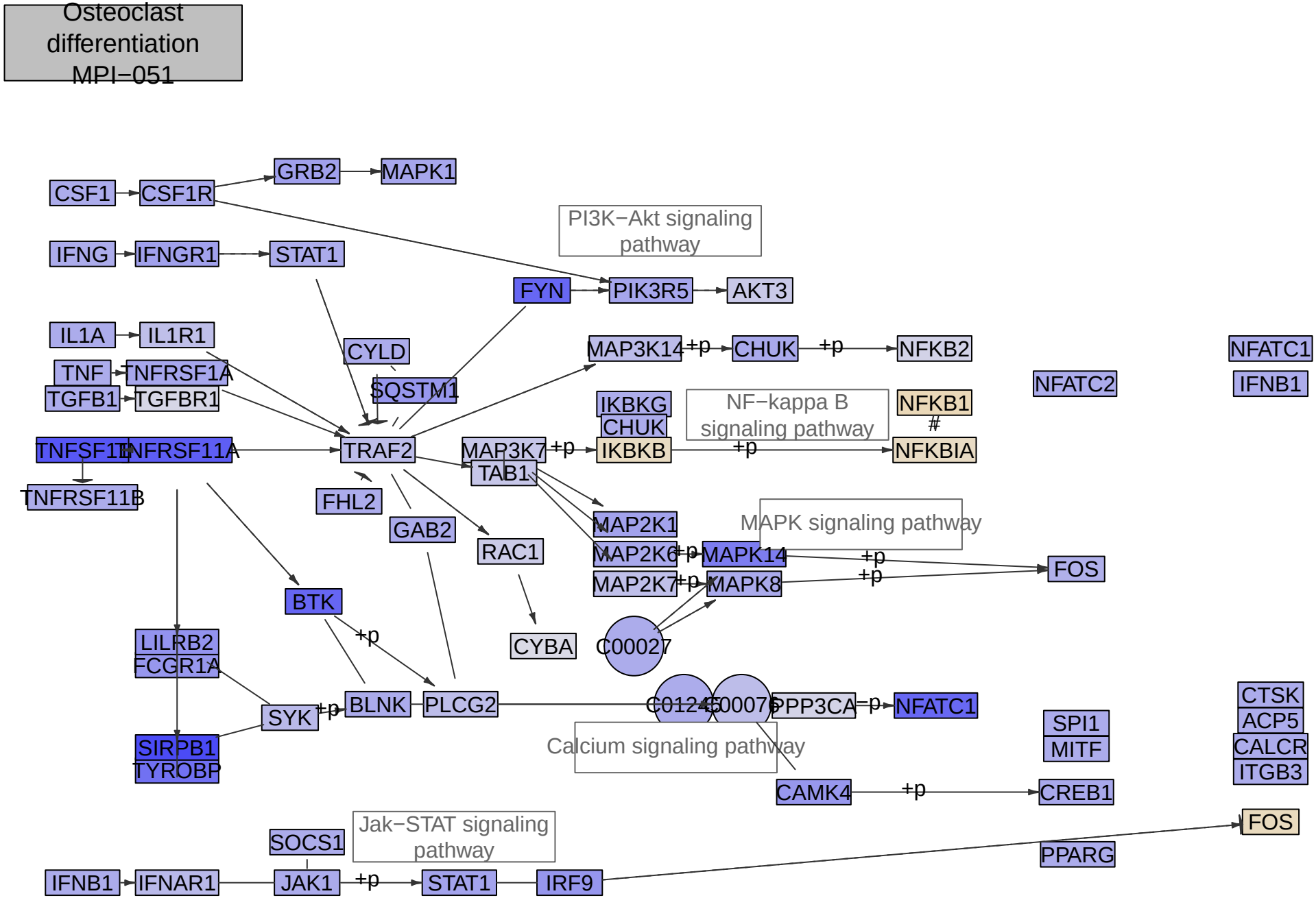
Osteoclast differentiation MPI−051
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CSF1R
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STAT1
FYN
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AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
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TNFRSF1A
SQSTM1
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TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
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BLNK
PLCG2
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SPI1
MITF
CTSK
ACP5
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ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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IFNAR1
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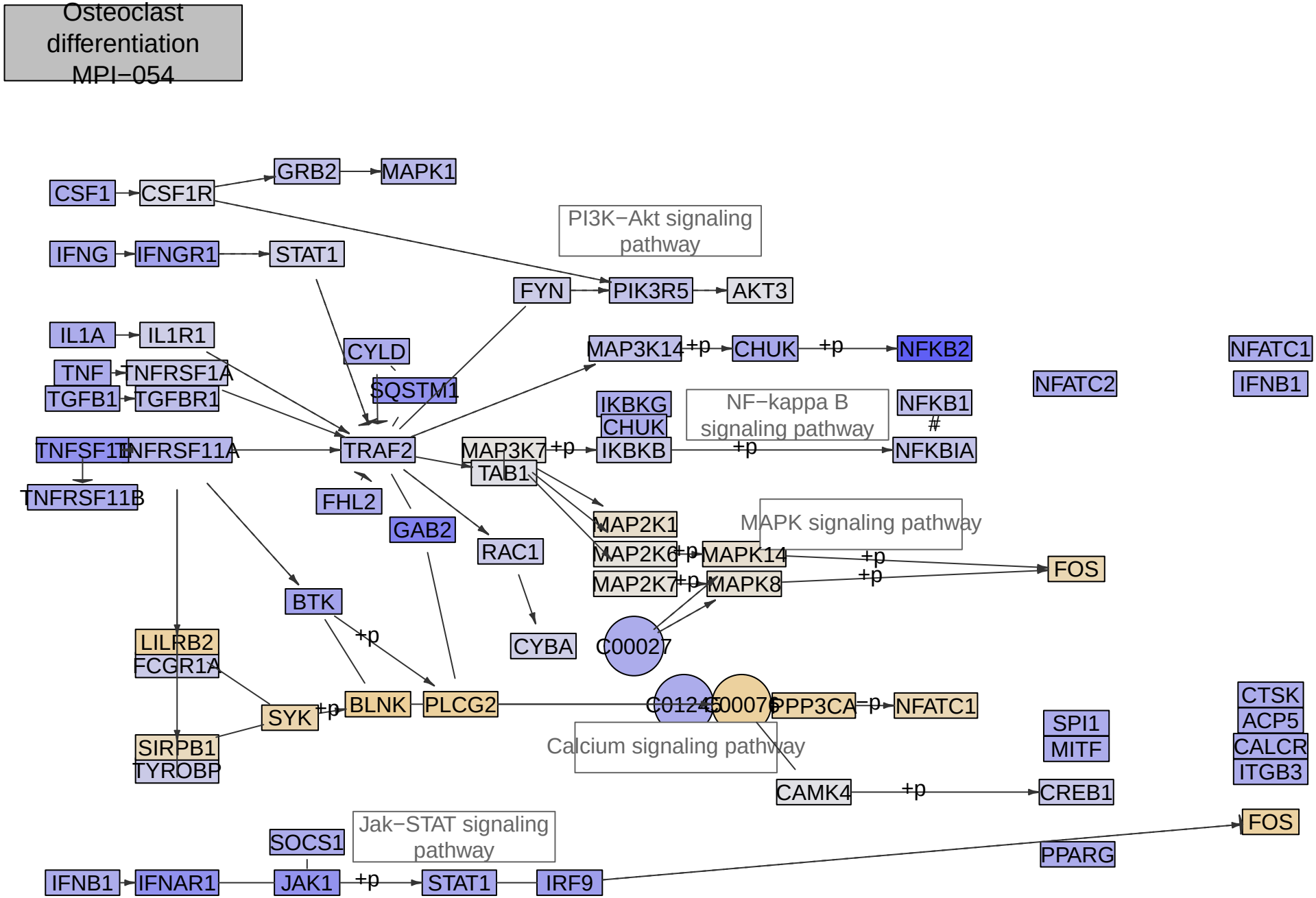
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FYN
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AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
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TNF
TNFRSF1A
SQSTM1
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IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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TRAF2
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IKBKB
+p
NFKBIA
TAB1
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FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
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+p
MAPK14
+p
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
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CYBA
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SYK
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BLNK
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C01245
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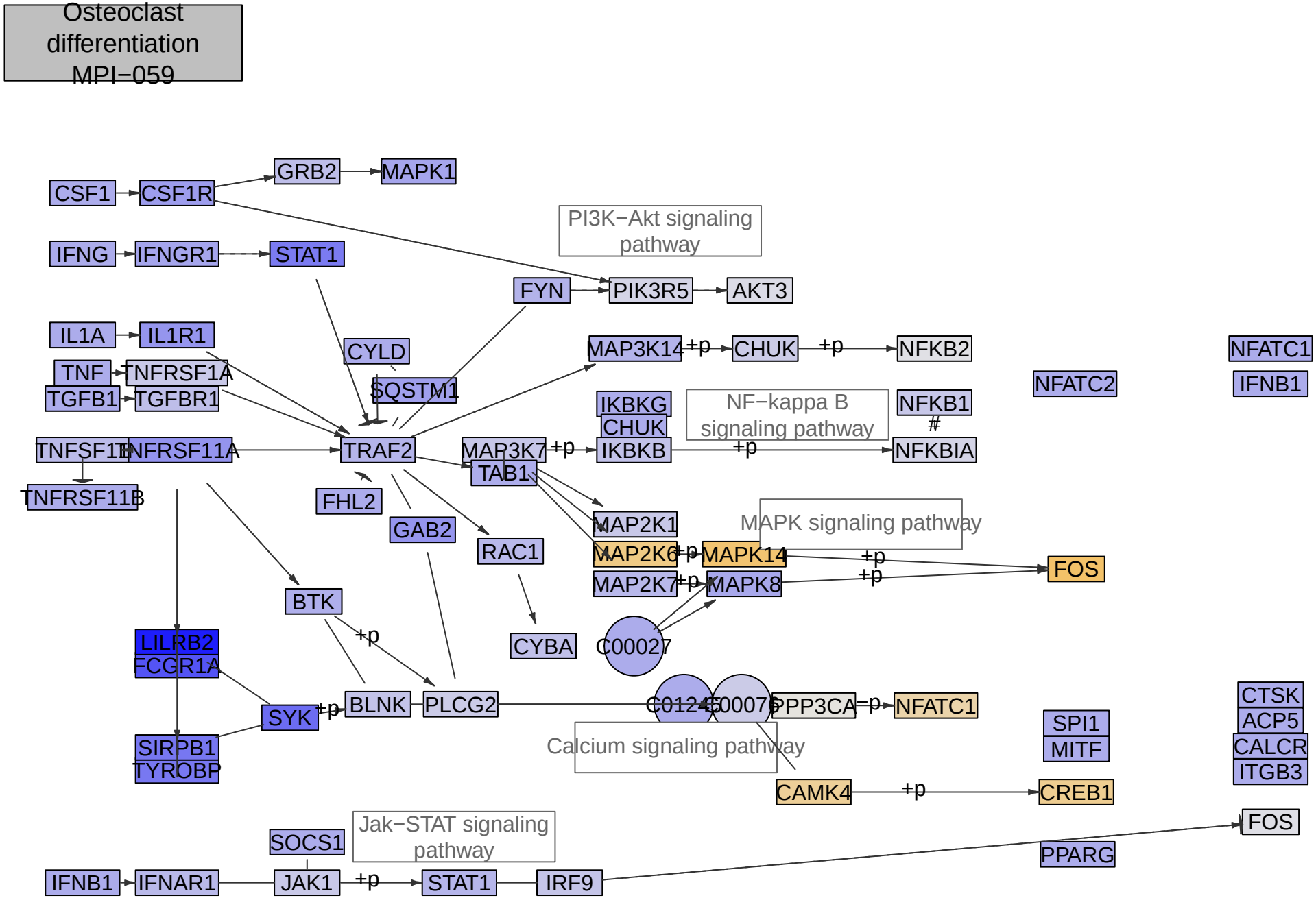
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IL1R1
CYLD
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CHUK
+p
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IKBKB
+p
NFKBIA
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GAB2
MAP2K1
MAPK signaling pathway
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FOS
MAP2K7
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MAPK8
+p
BTK
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CYBA
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BLNK
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TYROBP
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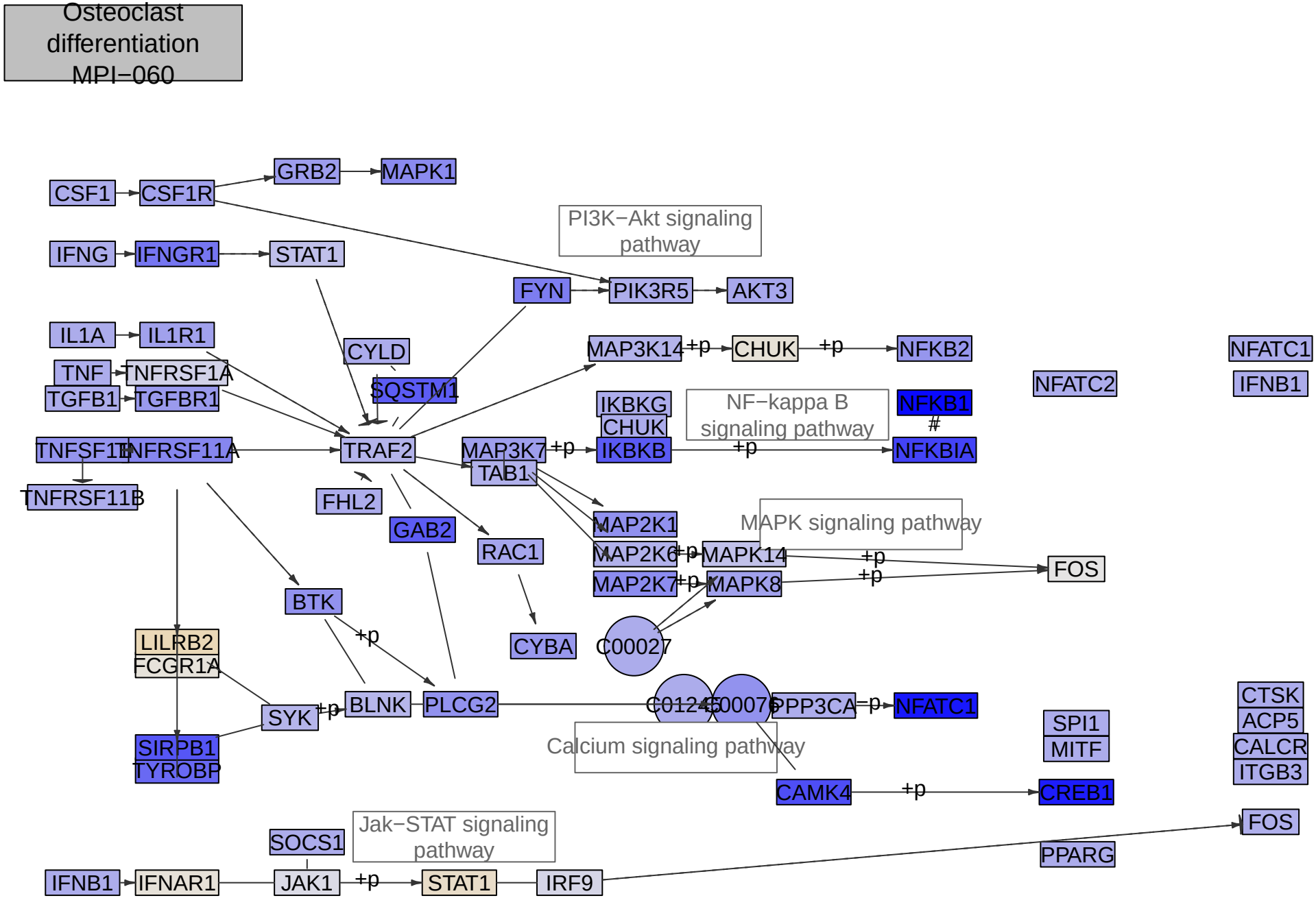
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IL1R1
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CHUK
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TGFBR1
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NF−kappa B signaling pathway
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GAB2
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MAPK signaling pathway
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MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
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CYBA
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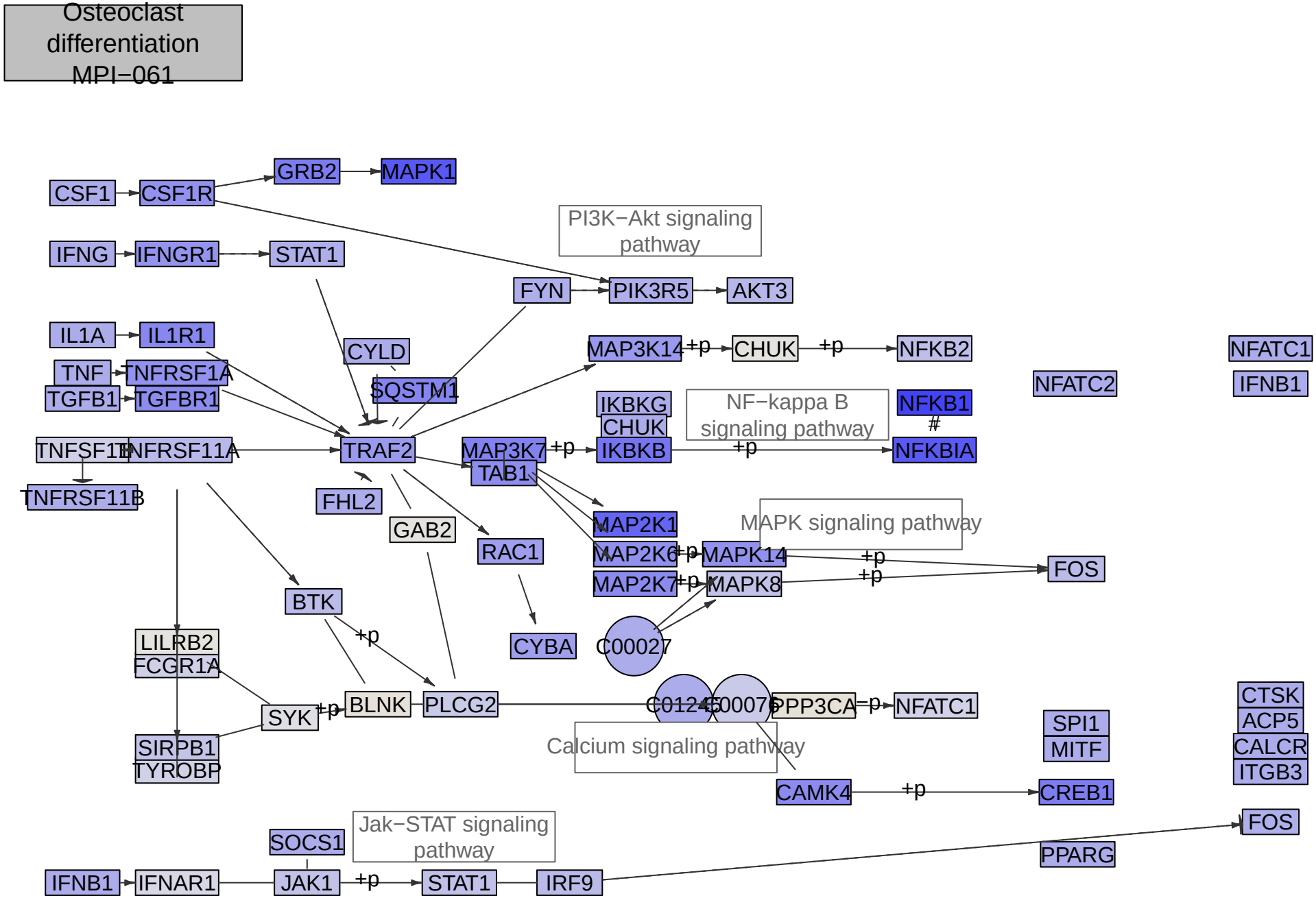
Osteoclast differentiation MPI−061
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IL1R1
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+p
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TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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TNFRSF11A
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+p
NFKBIA
TAB1
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FHL2
GAB2
MAP2K1
MAPK signaling pathway
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MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
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MAPK8
+p
BTK
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ACP5
SPI1
MITF
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TYROBP
Calcium signaling pathway
CALCR
ITGB3
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Jak−STAT signaling pathway
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IFNAR1
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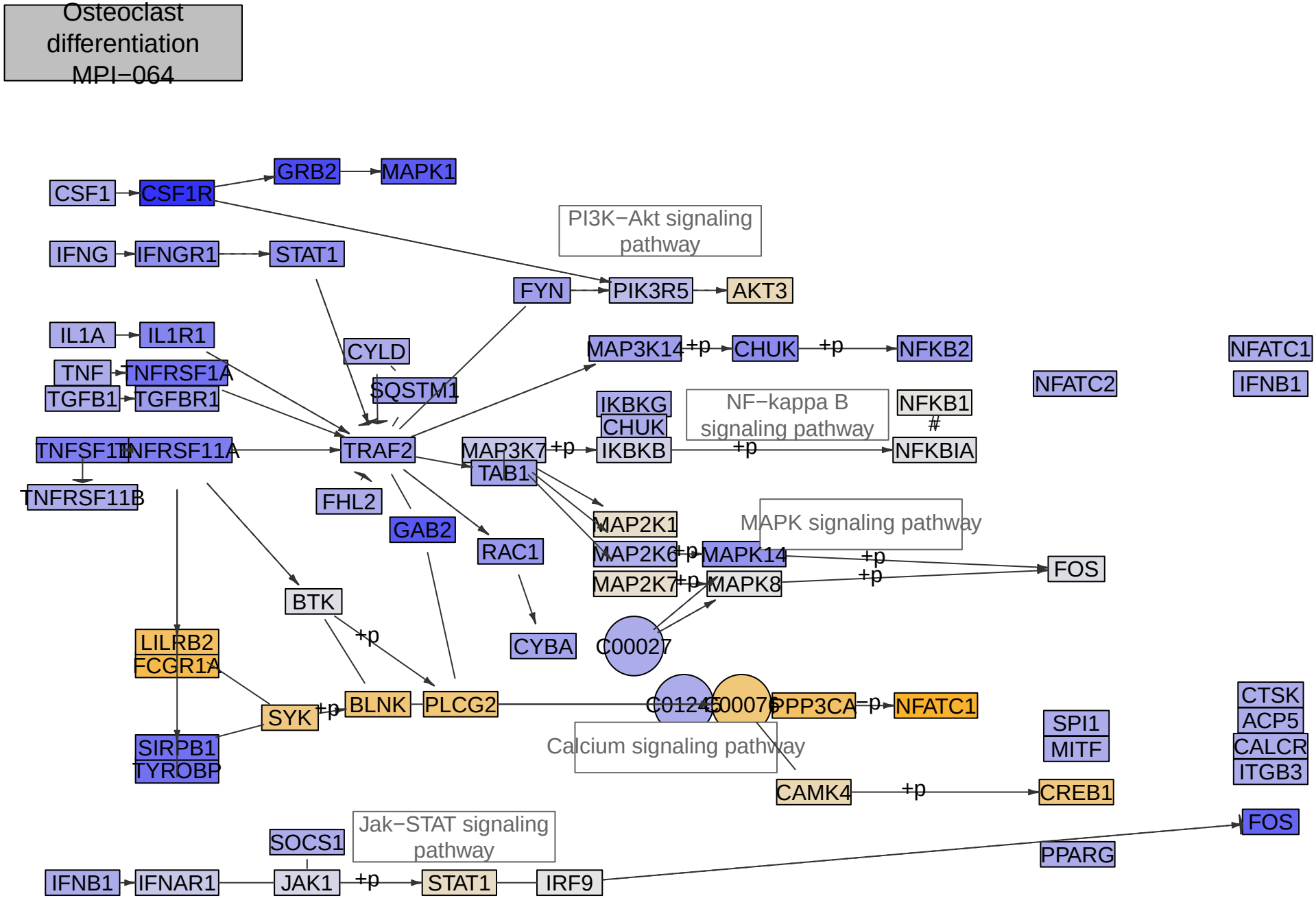
IRF9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+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
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BLNK
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SPI1
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TYROBP
Calcium signaling pathway
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ITGB3
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Jak−STAT signaling pathway
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IFNAR1
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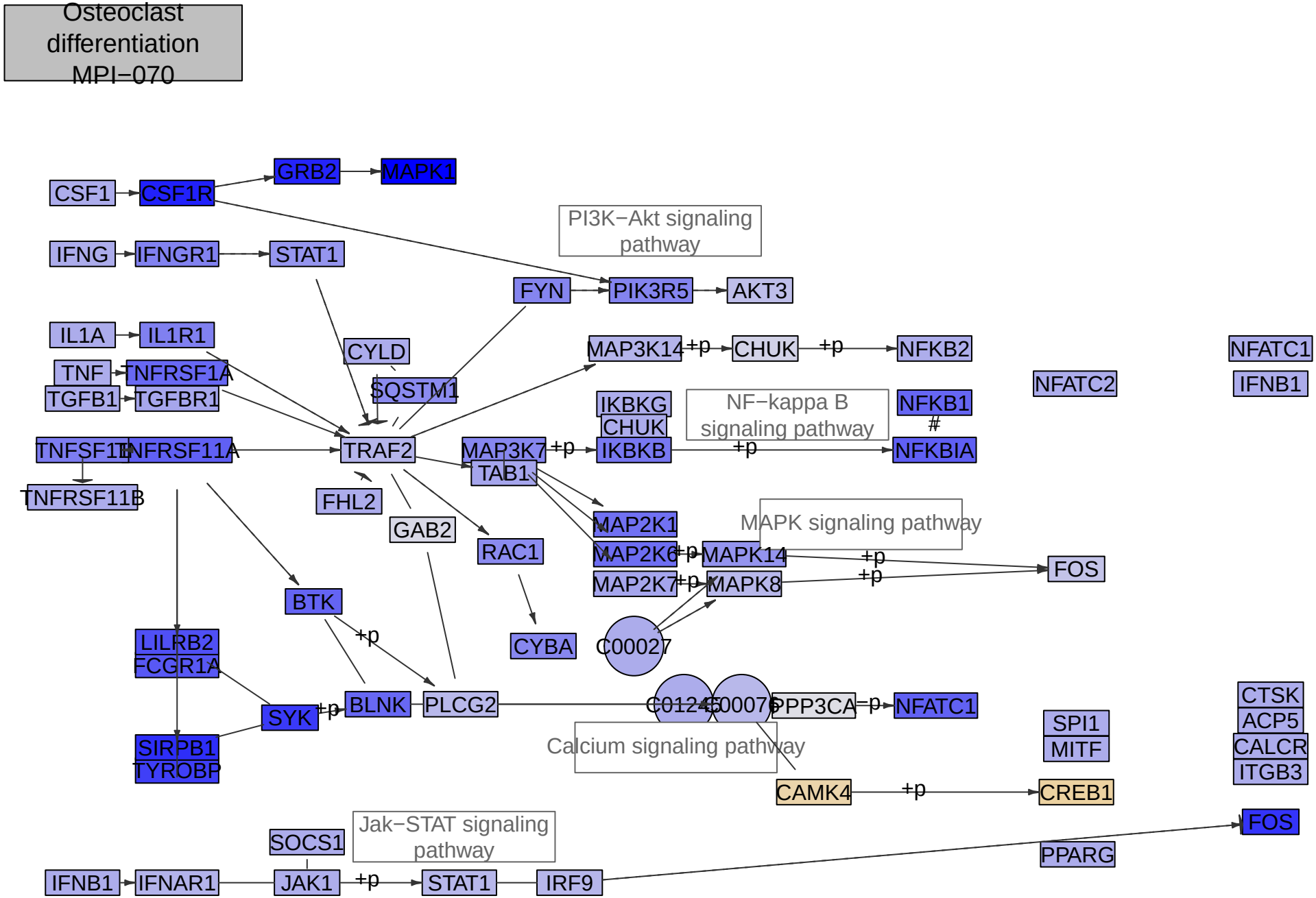
IRF9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TNF
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IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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TNFRSF11A
TRAF2
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+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
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BTK
+p
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CYBA
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TYROBP
Calcium signaling pathway
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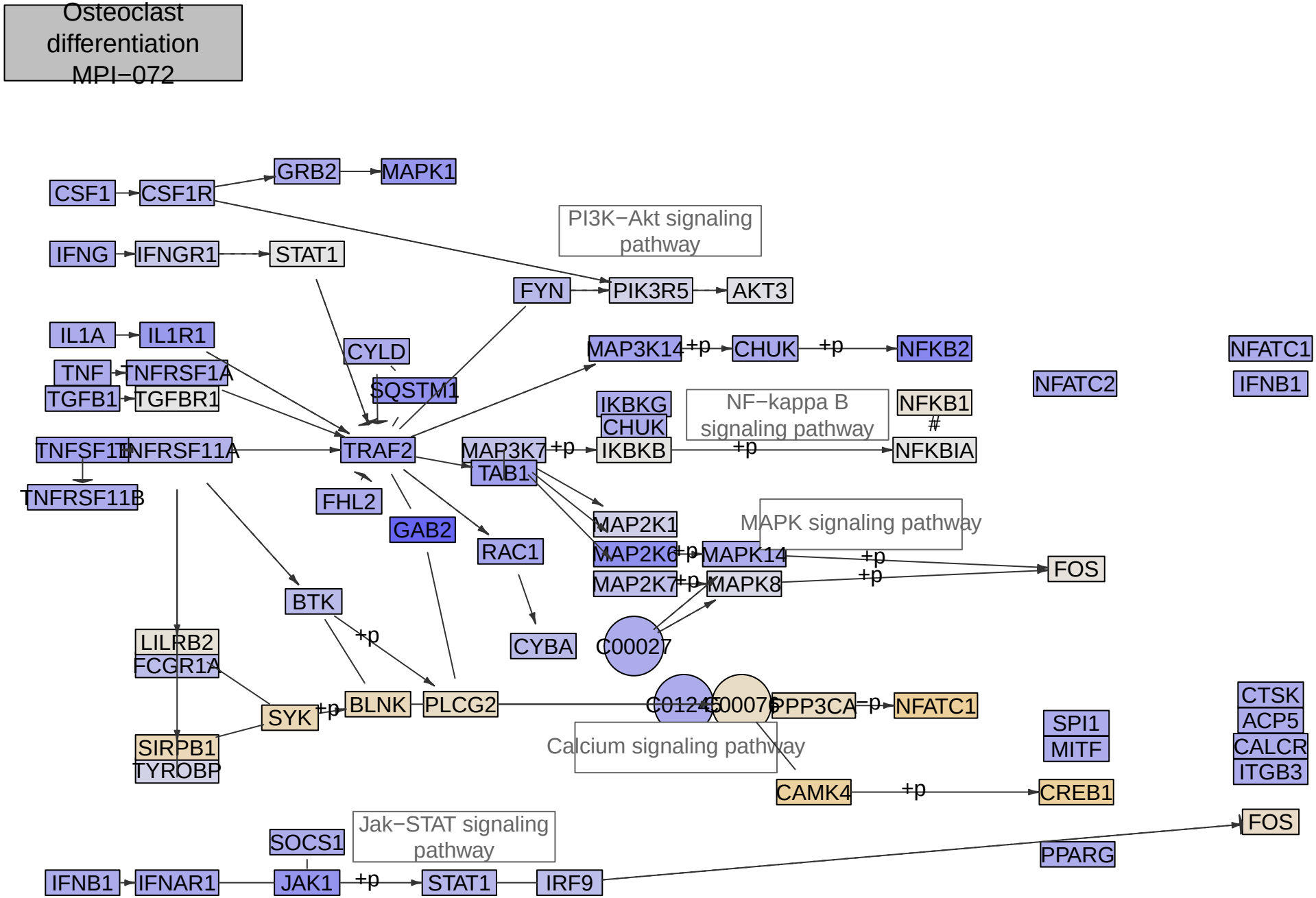
IRF9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NFATC1
TNF
TNFRSF1A
SQSTM1
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IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
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IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
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MAPK14
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+p
MAPK8
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BTK
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+p
CYBA
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TYROBP
Calcium signaling pathway
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ACP5
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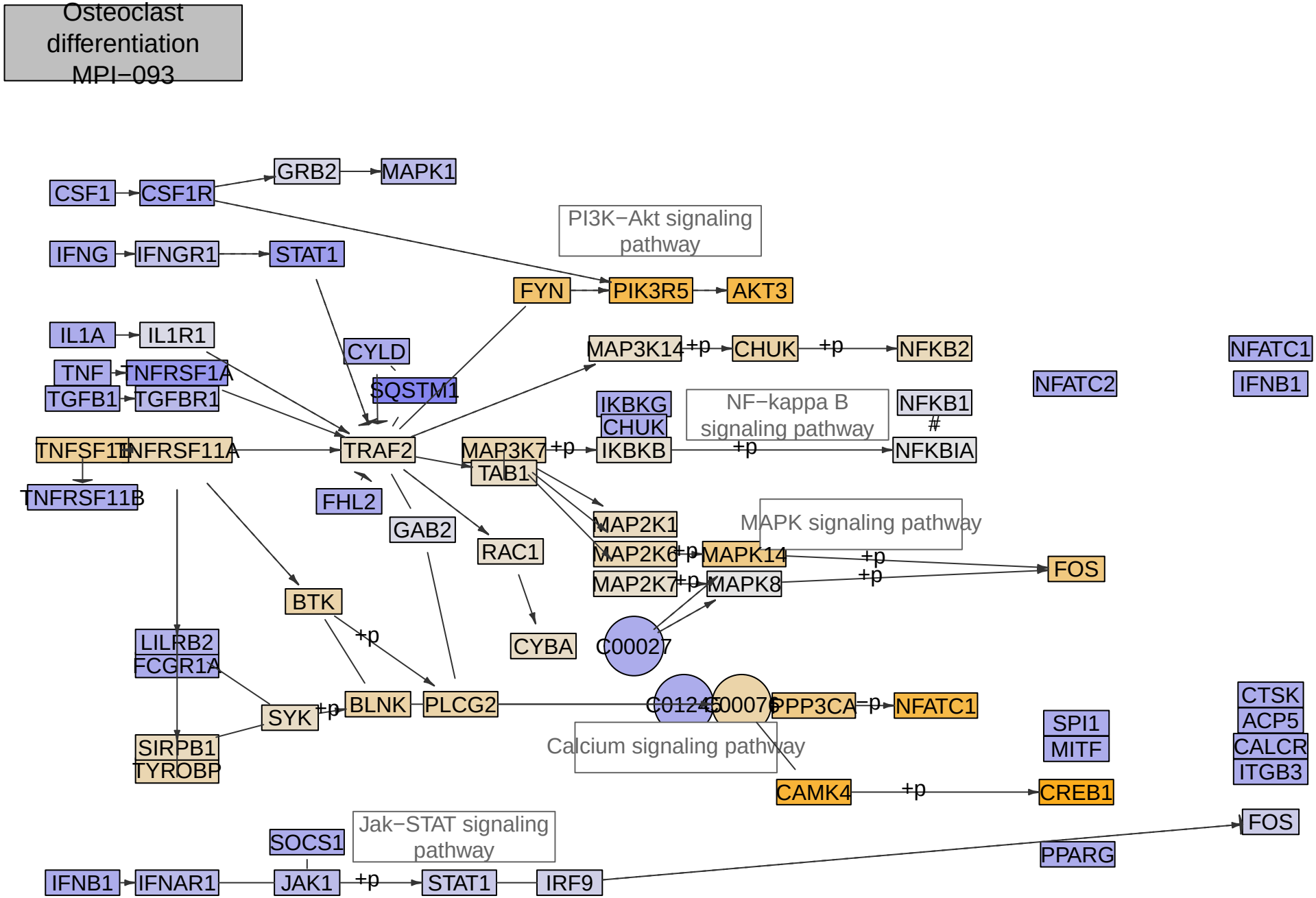
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TNF
TNFRSF1A
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NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
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+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
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BLNK
PLCG2
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PPP3CA
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NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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Jak−STAT signaling pathway
FOS
PPARG
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IFNAR1
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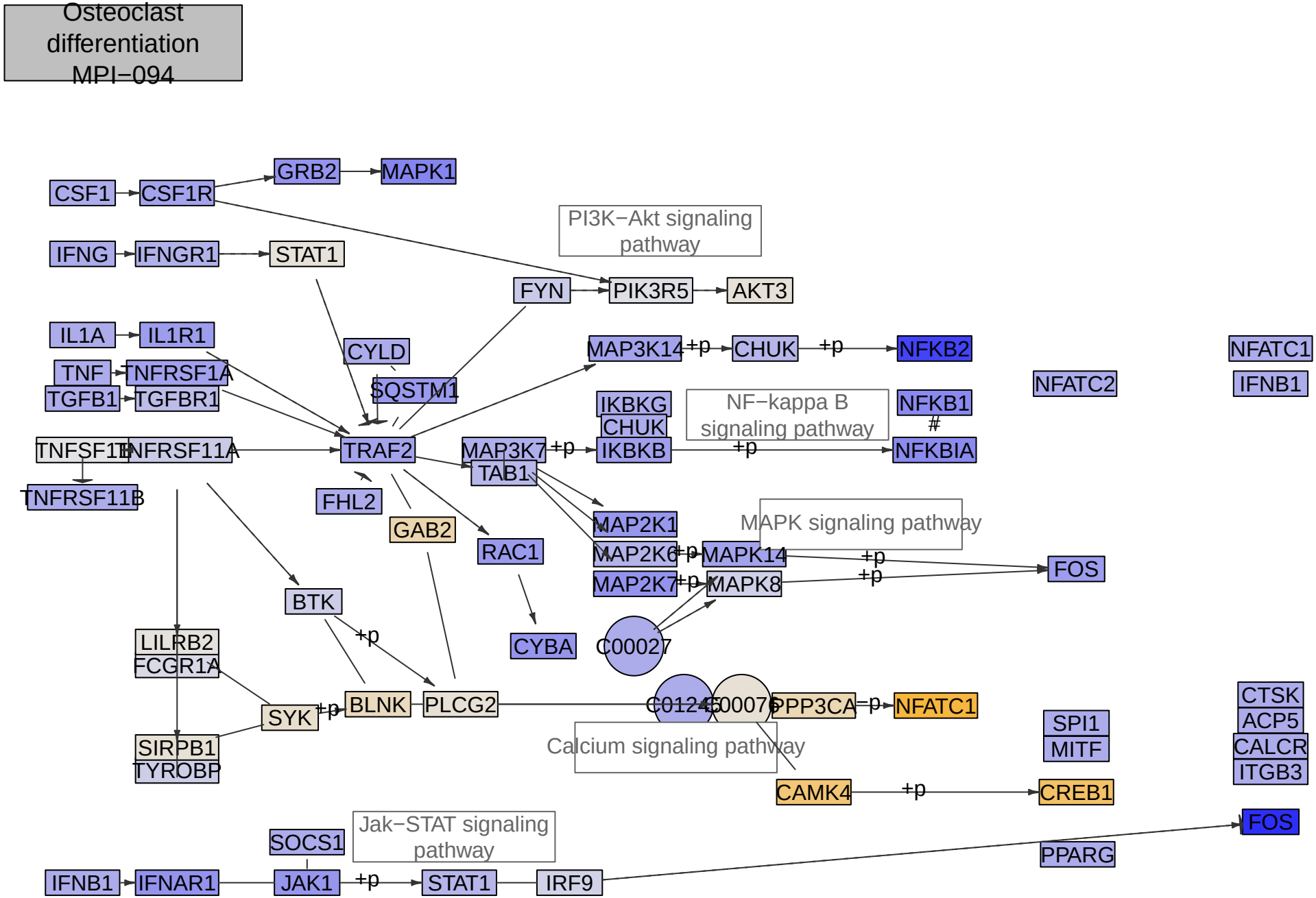
STAT1
IRF9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TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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TNFRSF11A
TRAF2
MAP3K7
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IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
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CYBA
C00027
SYK
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NFATC1
CTSK
ACP5
SPI1
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ITGB3
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TYROBP
Calcium signaling pathway
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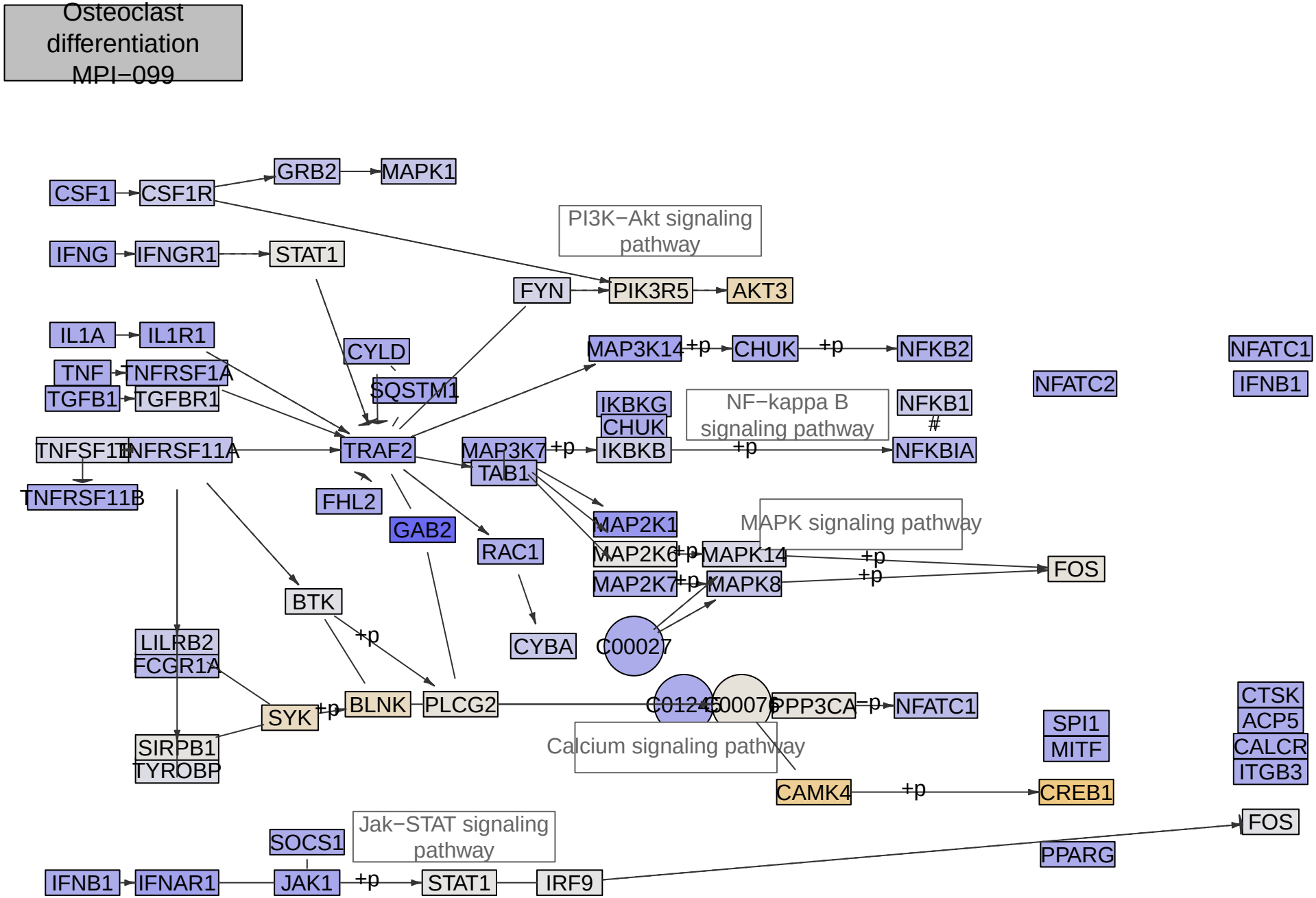
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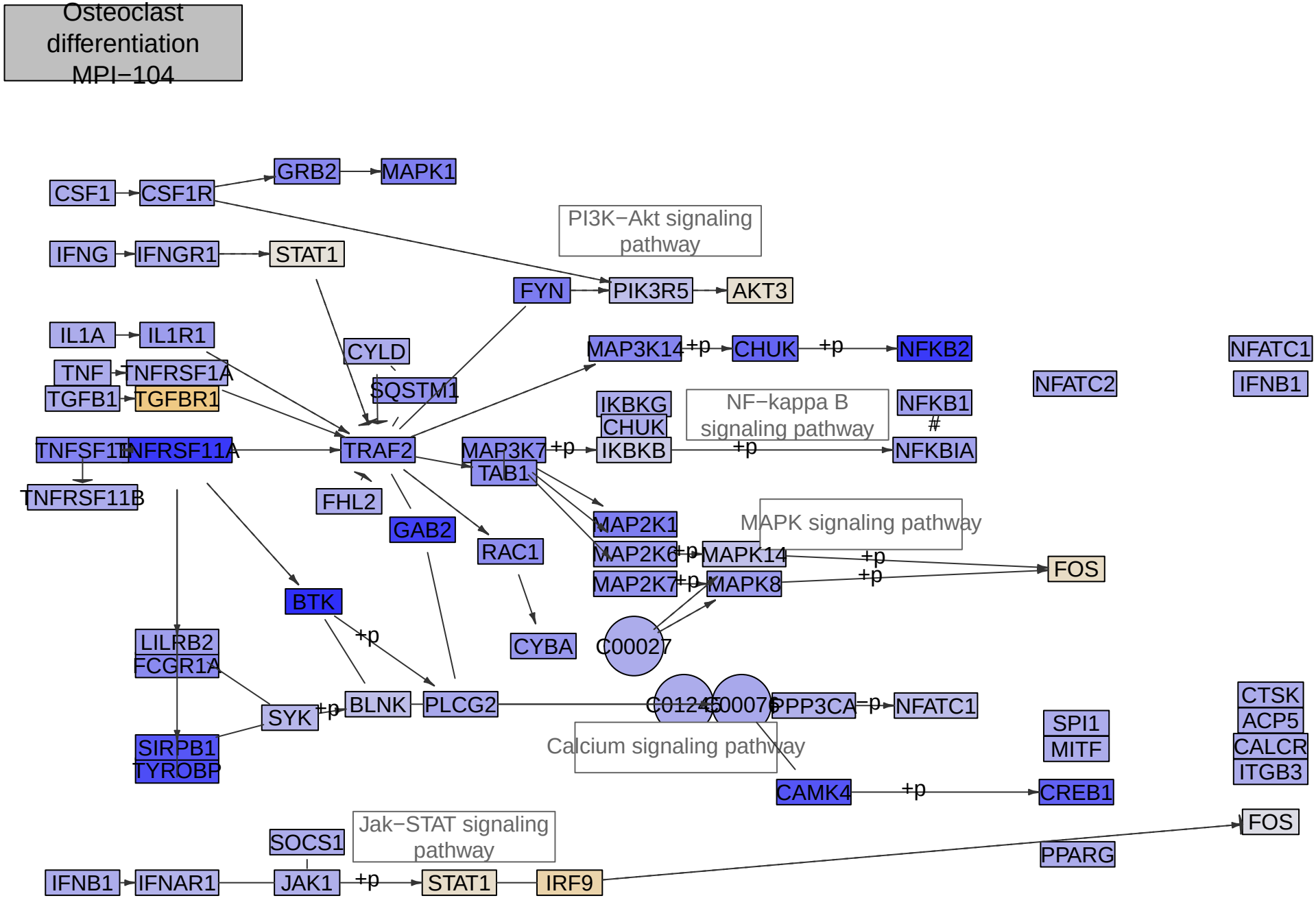
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−104
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MAPK1
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CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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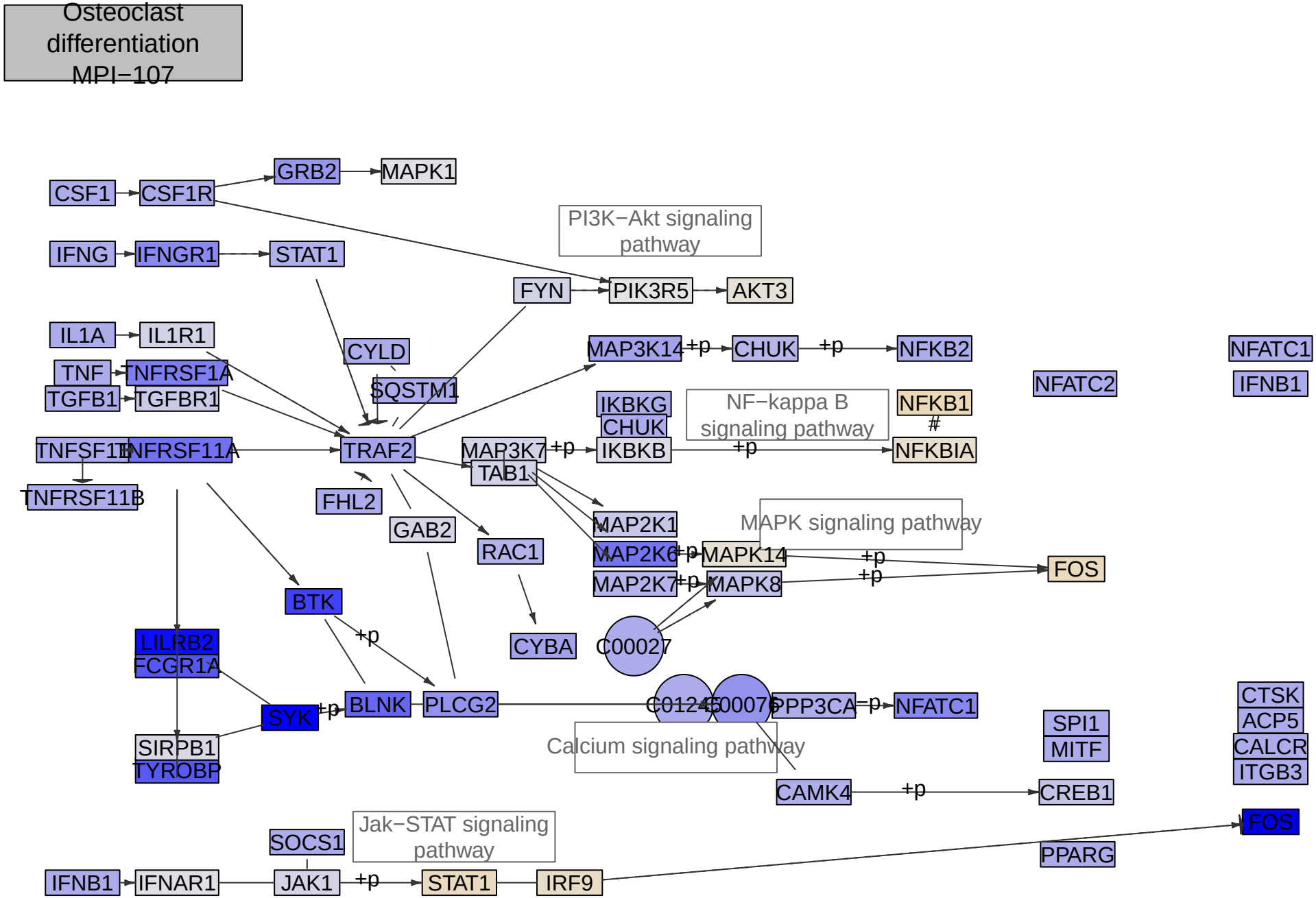
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
MAP2K1
MAPK signaling pathway
GAB2
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−107
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MAPK1
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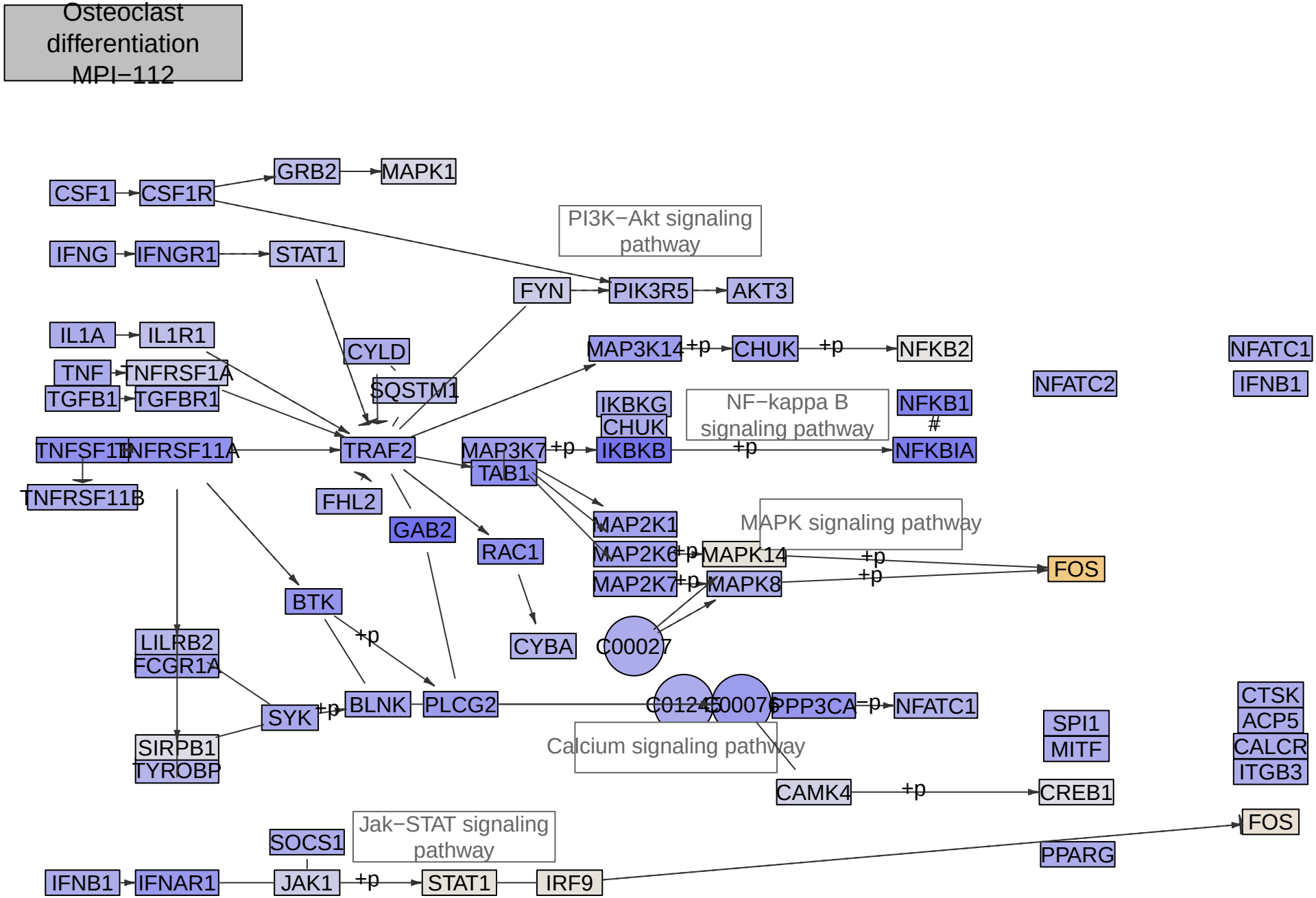
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
=p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−112
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CSF1
CSF1R
PI3K−Akt signaling pathway
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IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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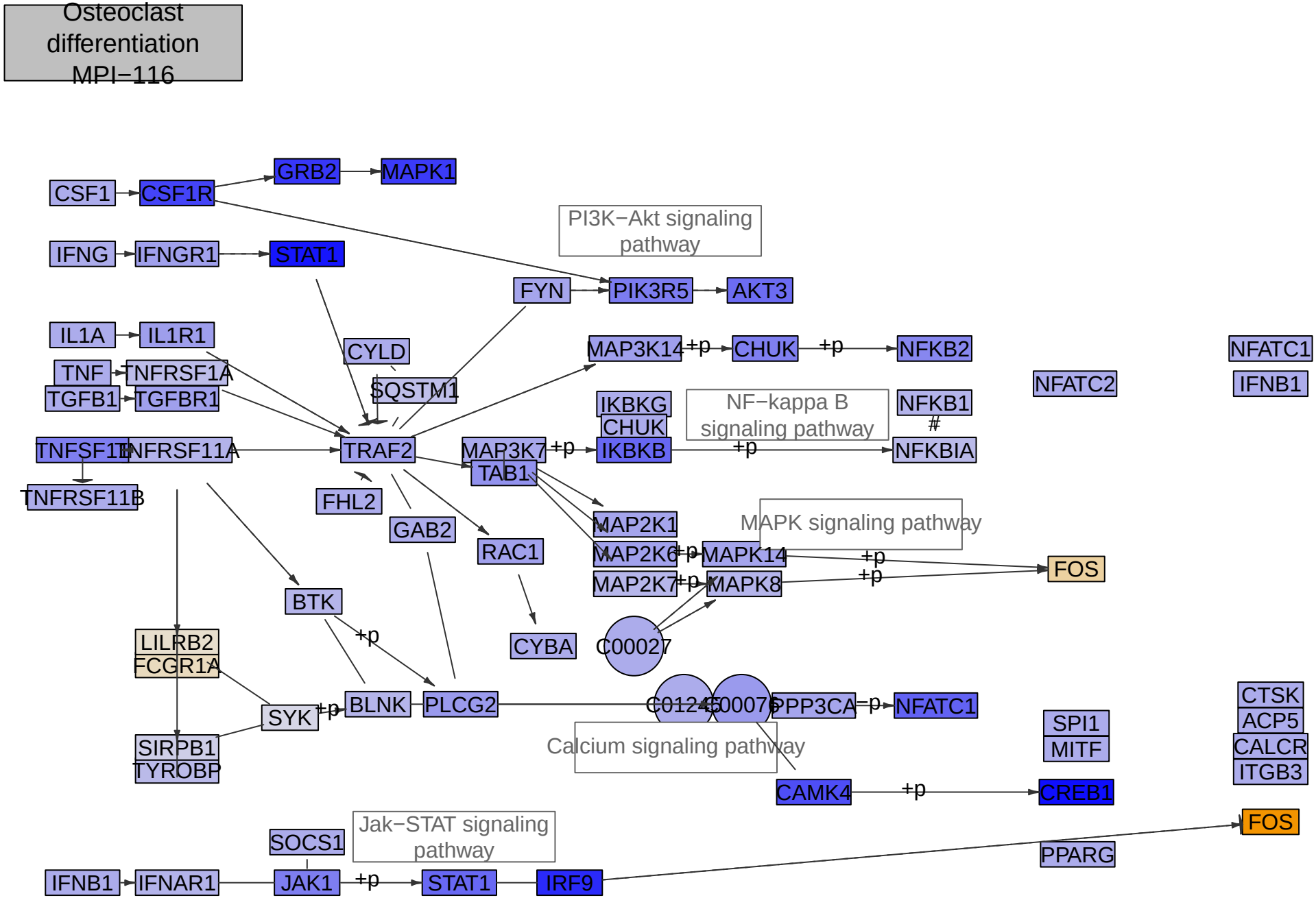
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−116
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CSF1R
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IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
CAMK4
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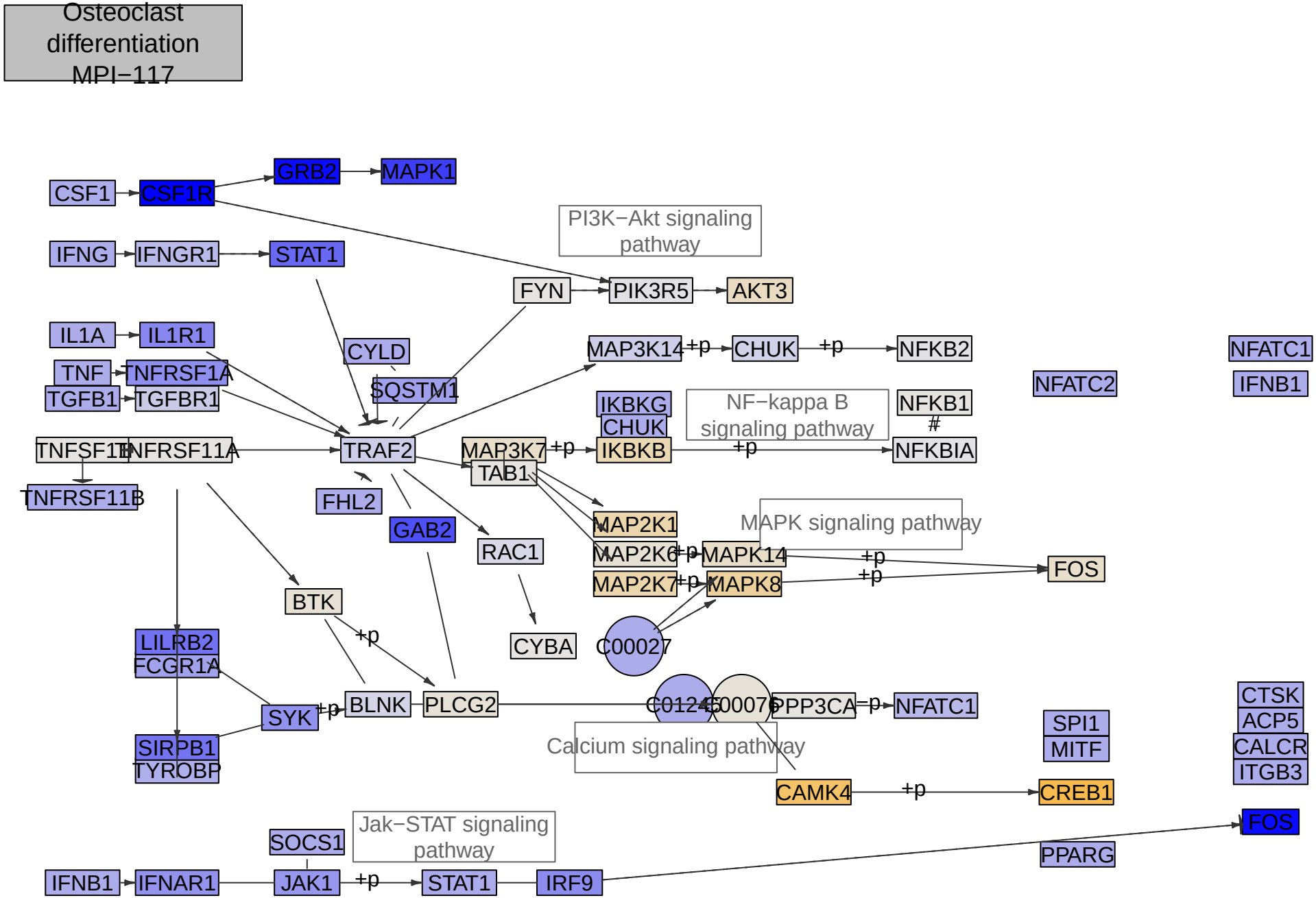
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−117
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CSF1R
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PI3K−Akt signaling pathway
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IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
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TNF
TNFRSF1A
SQSTM1
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TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
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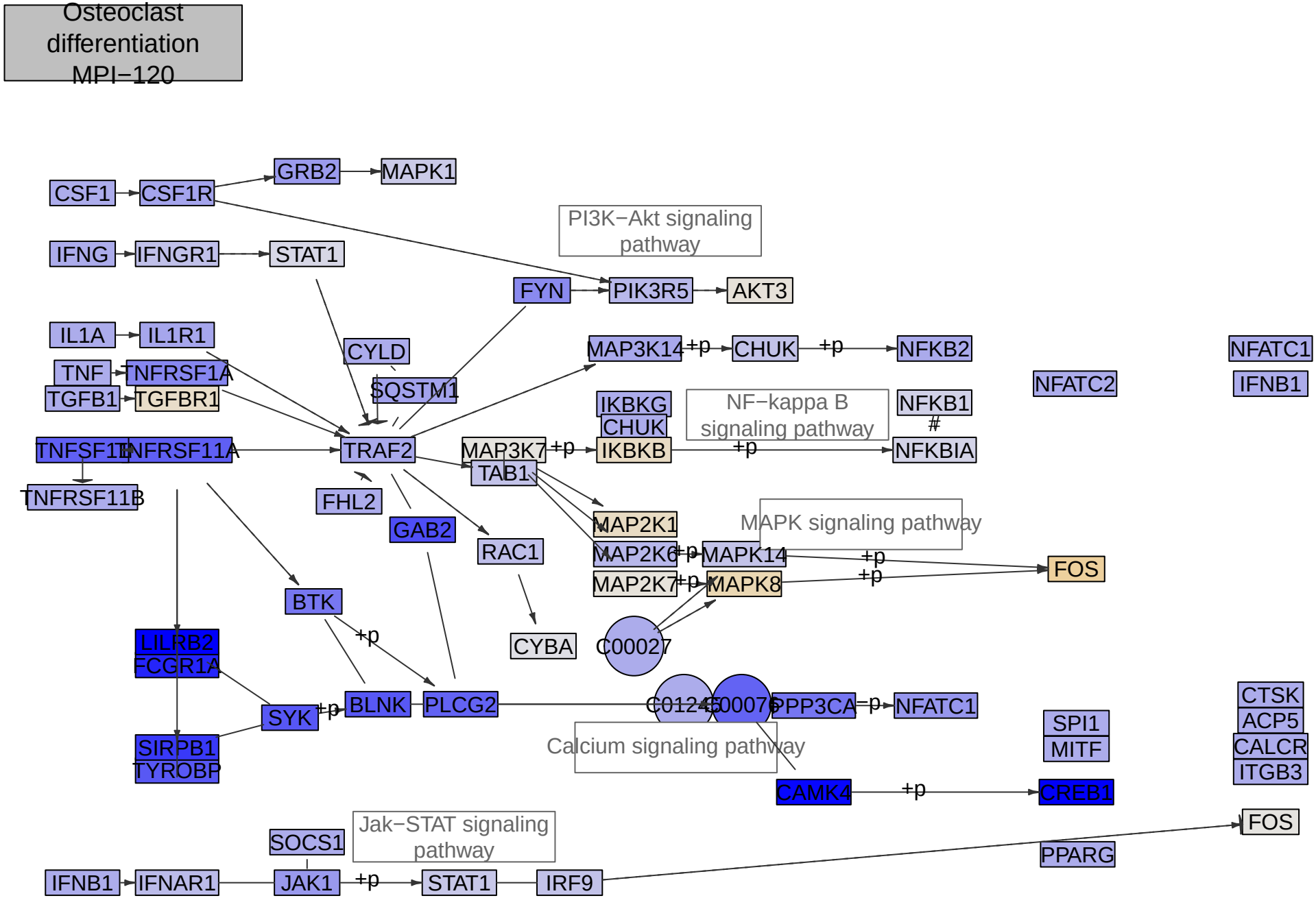
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−120
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CSF1R
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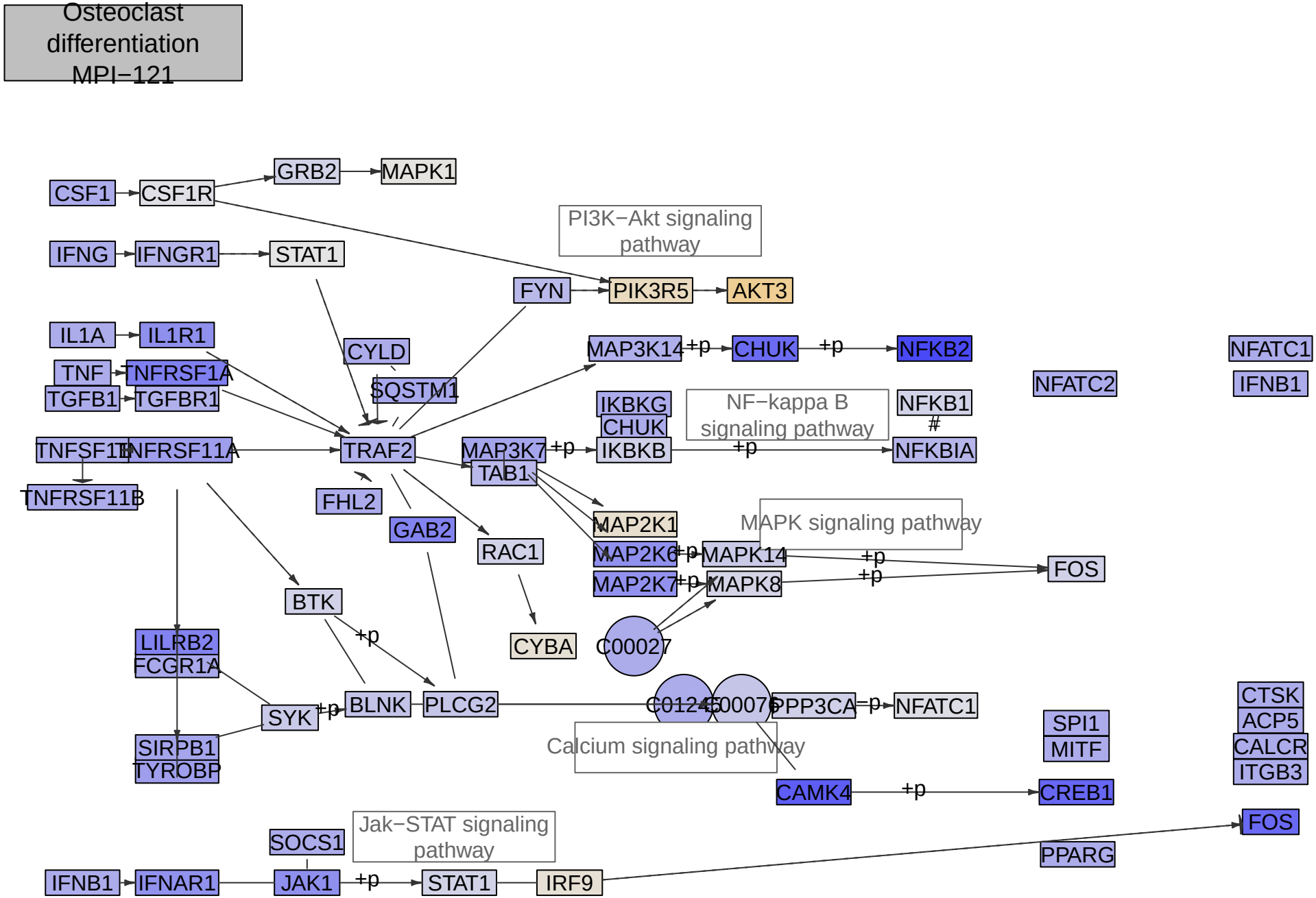
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−121
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CSF1R
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PI3K−Akt signaling pathway
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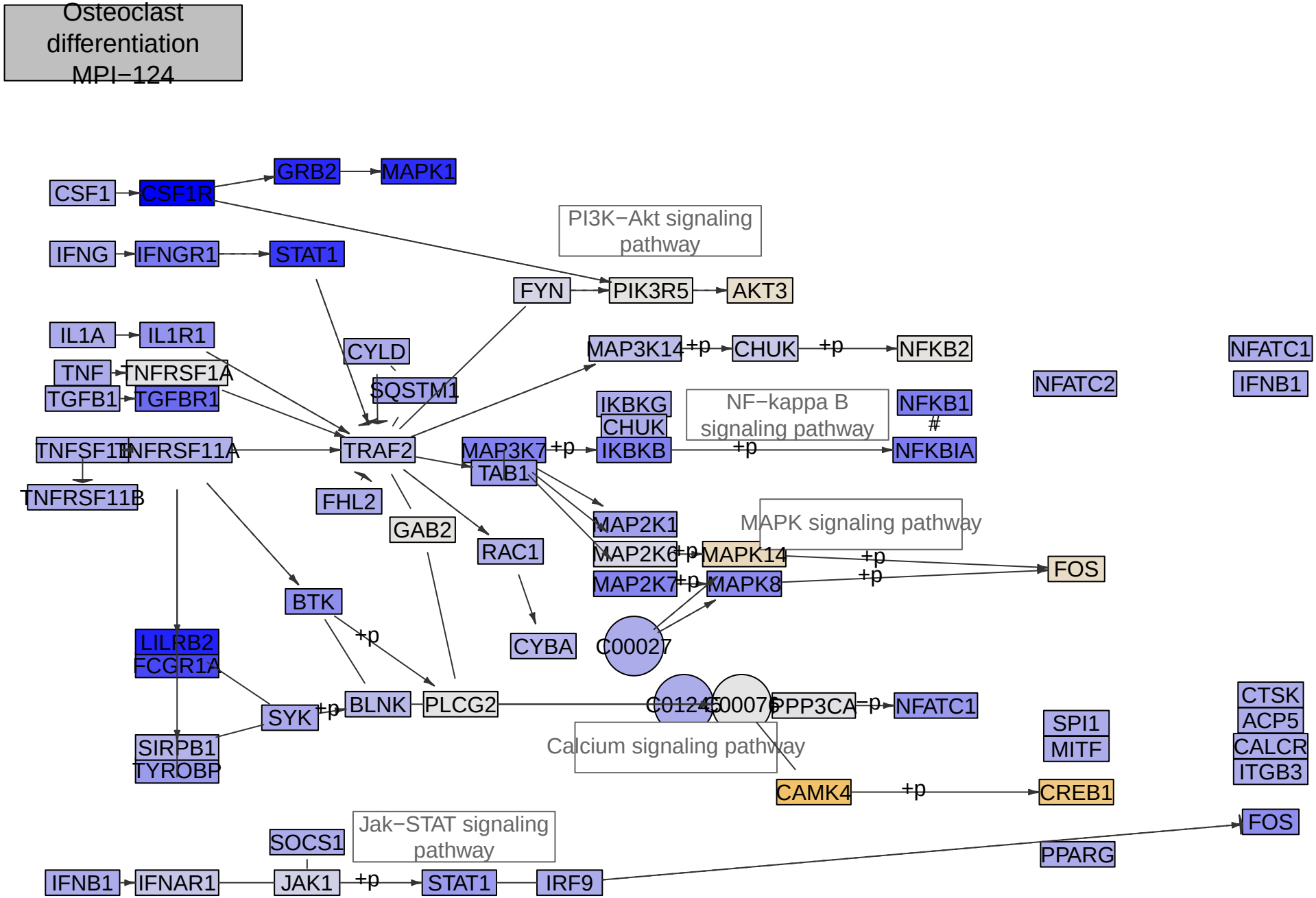
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
CAMK4
+p
CREB1
FOS
Jak−STAT signaling pathway
SOCS1
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−124
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IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
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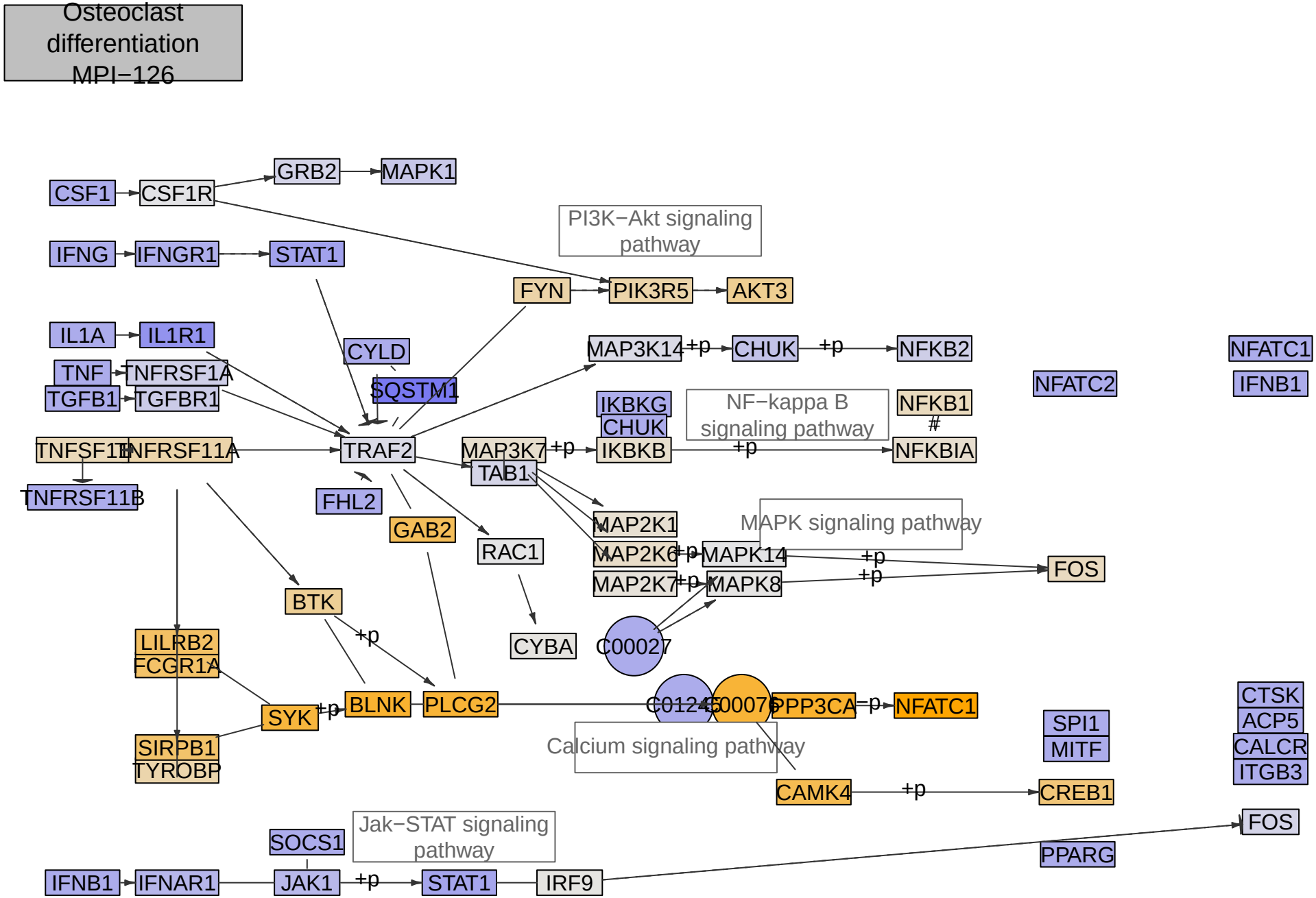
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−126
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FYN
PIK3R5
AKT3
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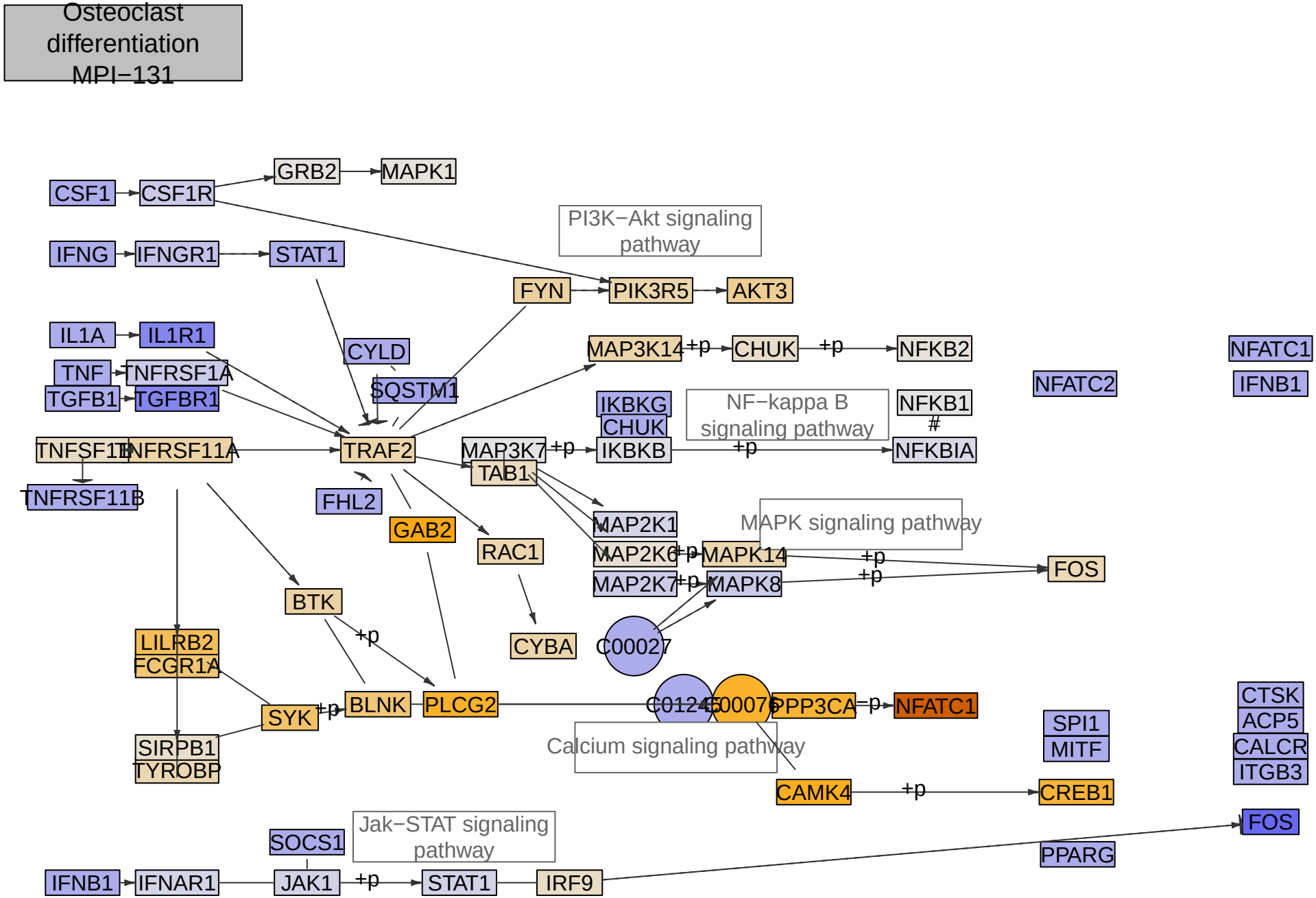
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
=p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−131
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STAT1
FYN
PIK3R5
AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
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IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
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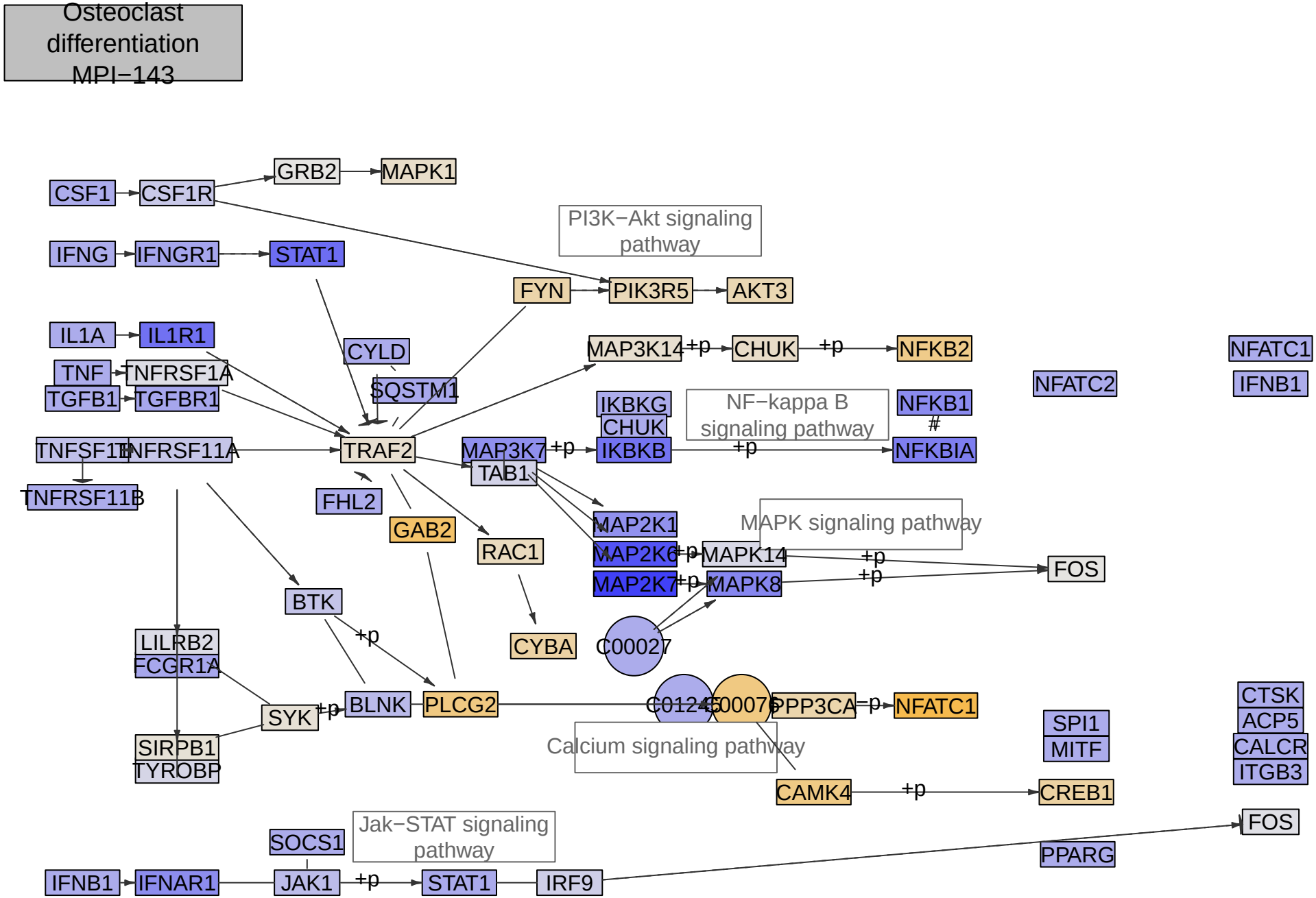
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−143
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STAT1
FYN
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AKT3
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CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
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NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
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FOS
SOCS1
Jak−STAT signaling pathway
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IFNB1
IFNAR1
JAK1
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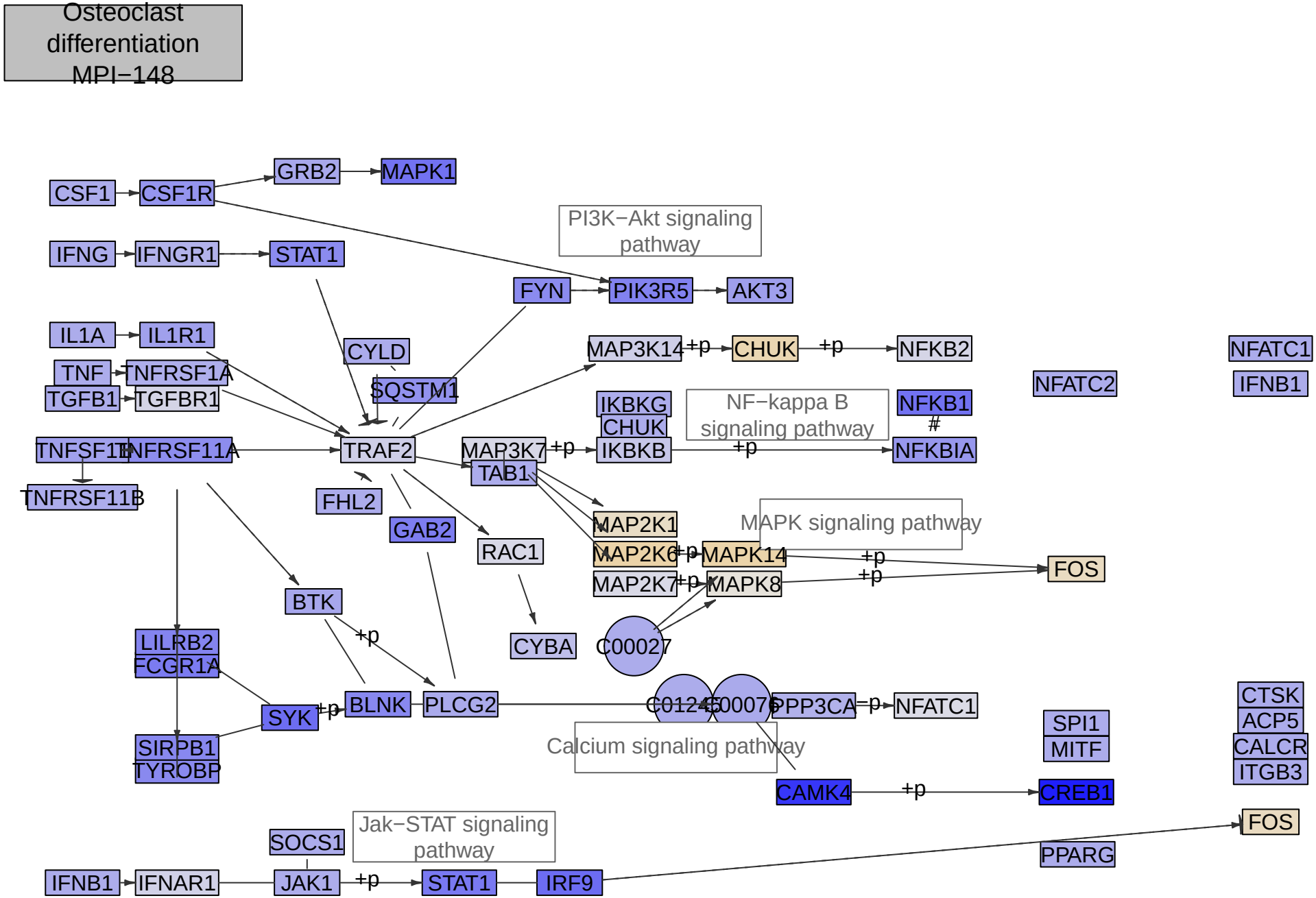
STAT1
IRF9


Osteoclast differentiation MPI−148
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FYN
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AKT3
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CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
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NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
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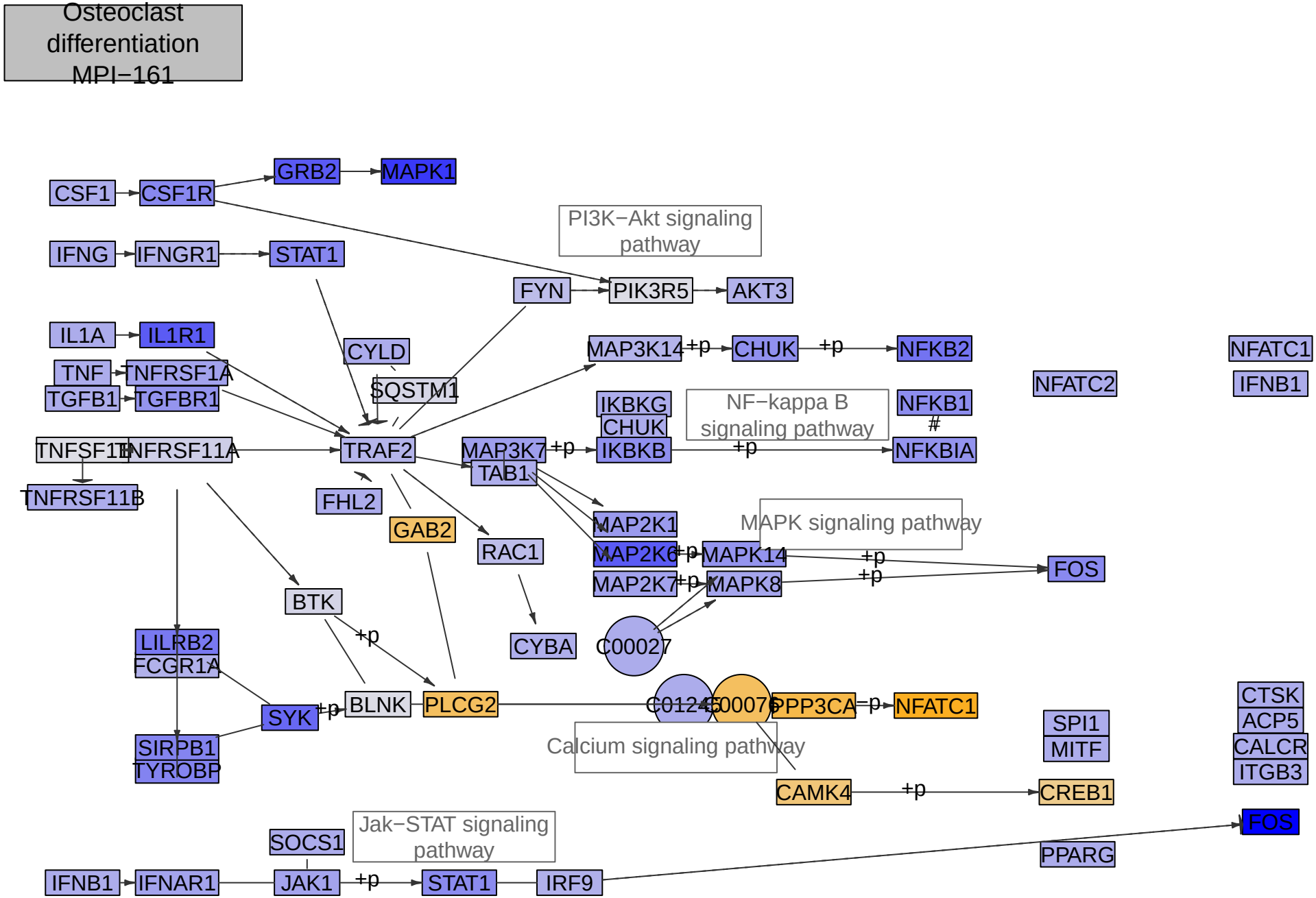
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−161
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IFNGR1
STAT1
FYN
PIK3R5
AKT3
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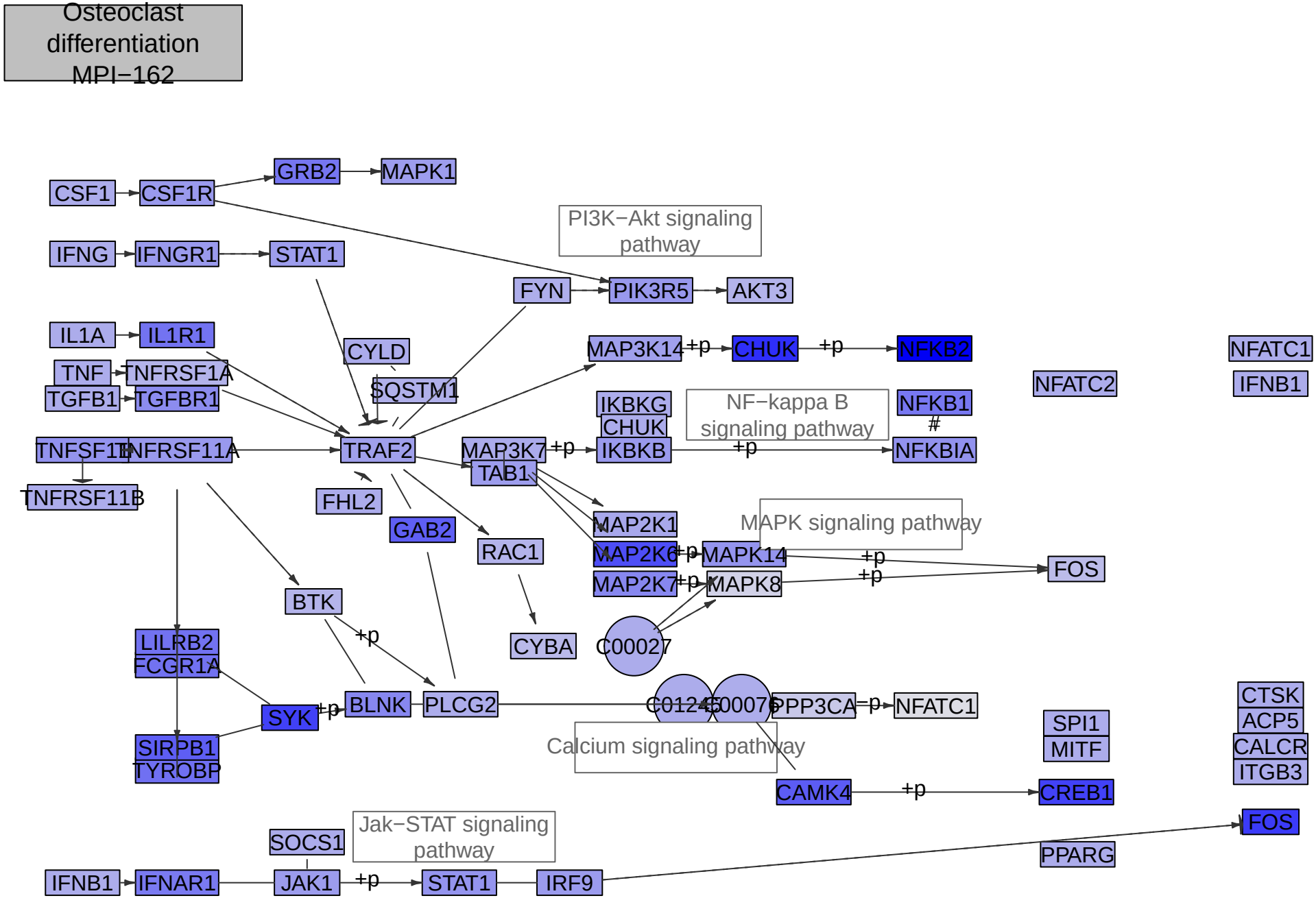
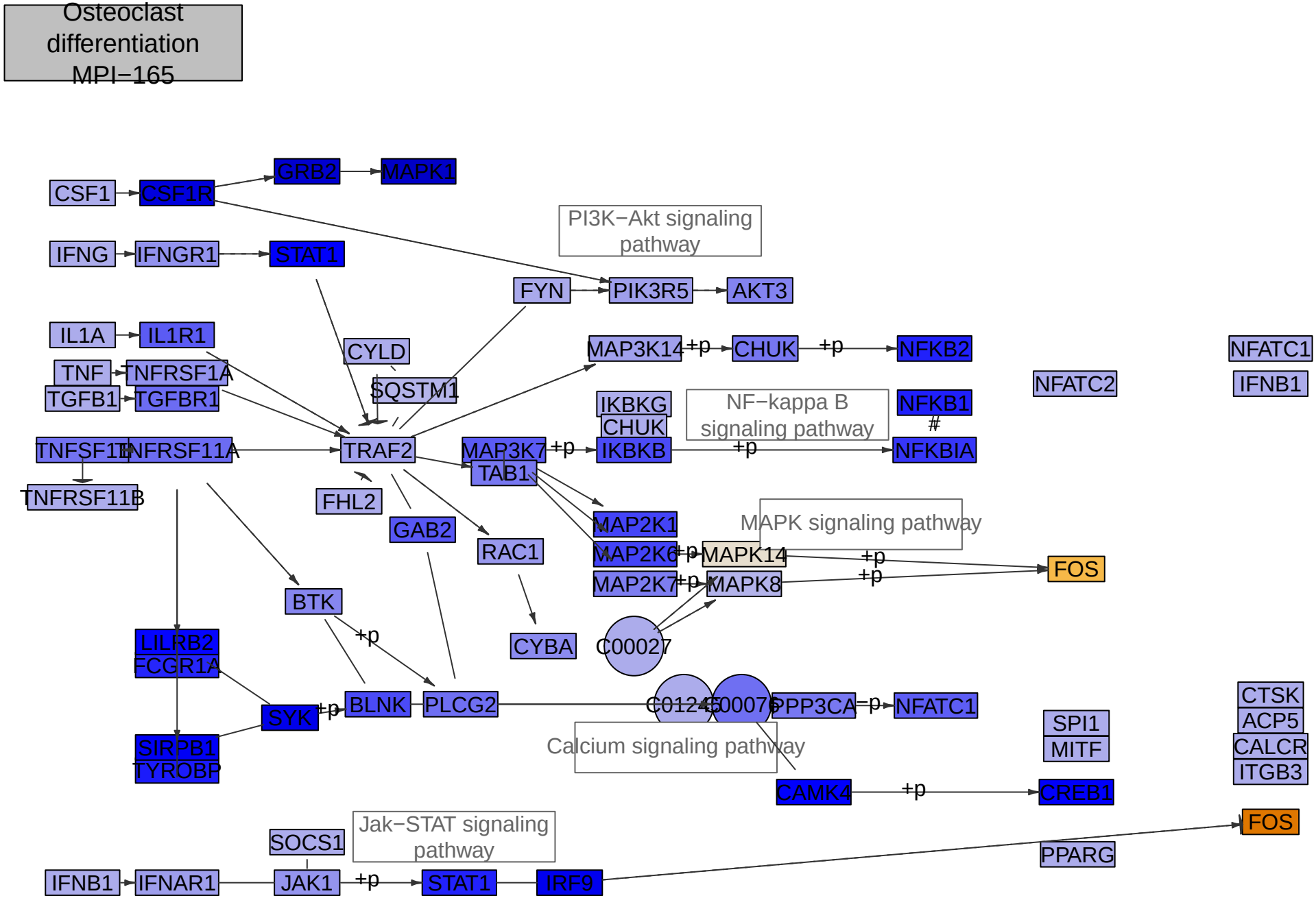
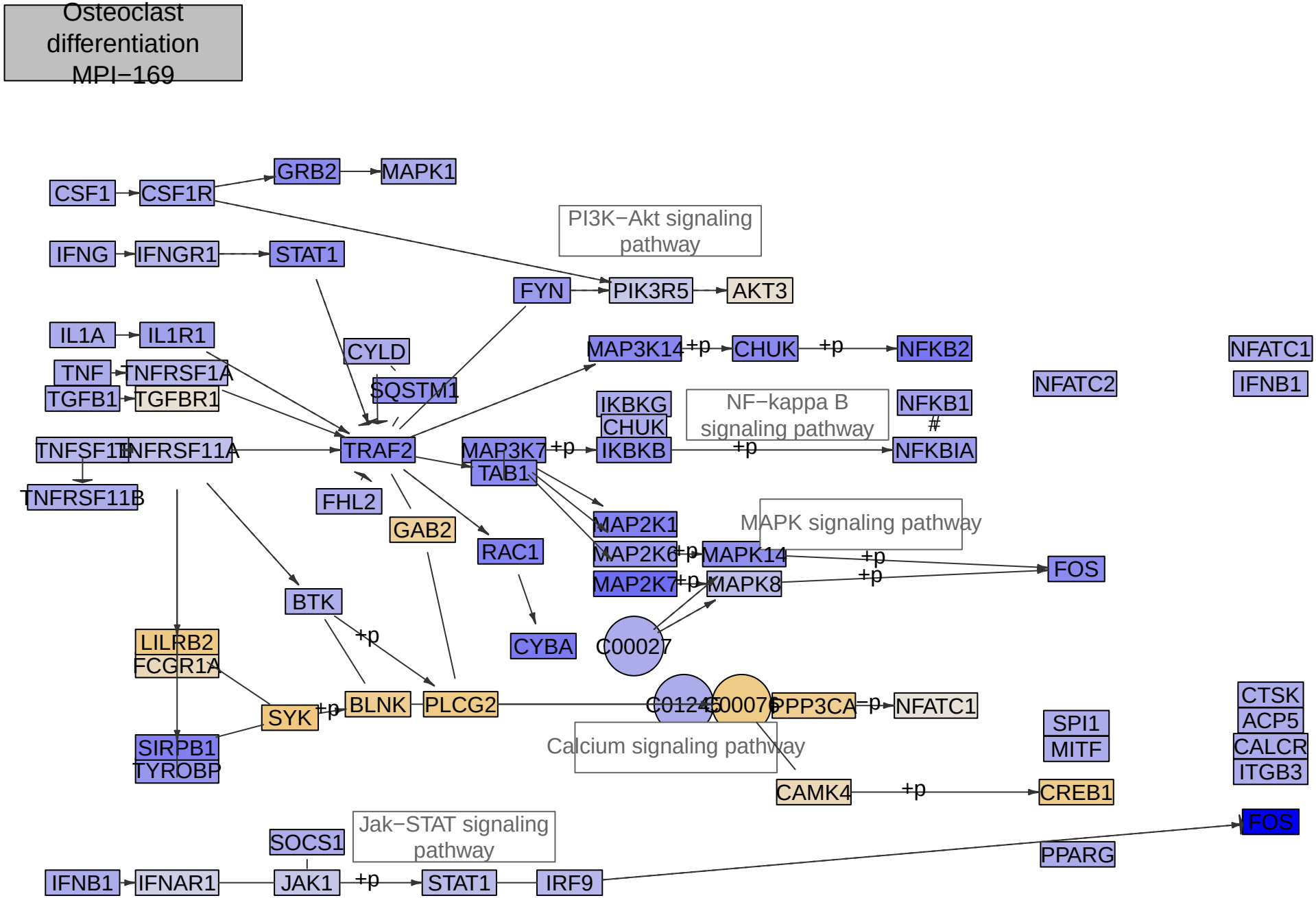
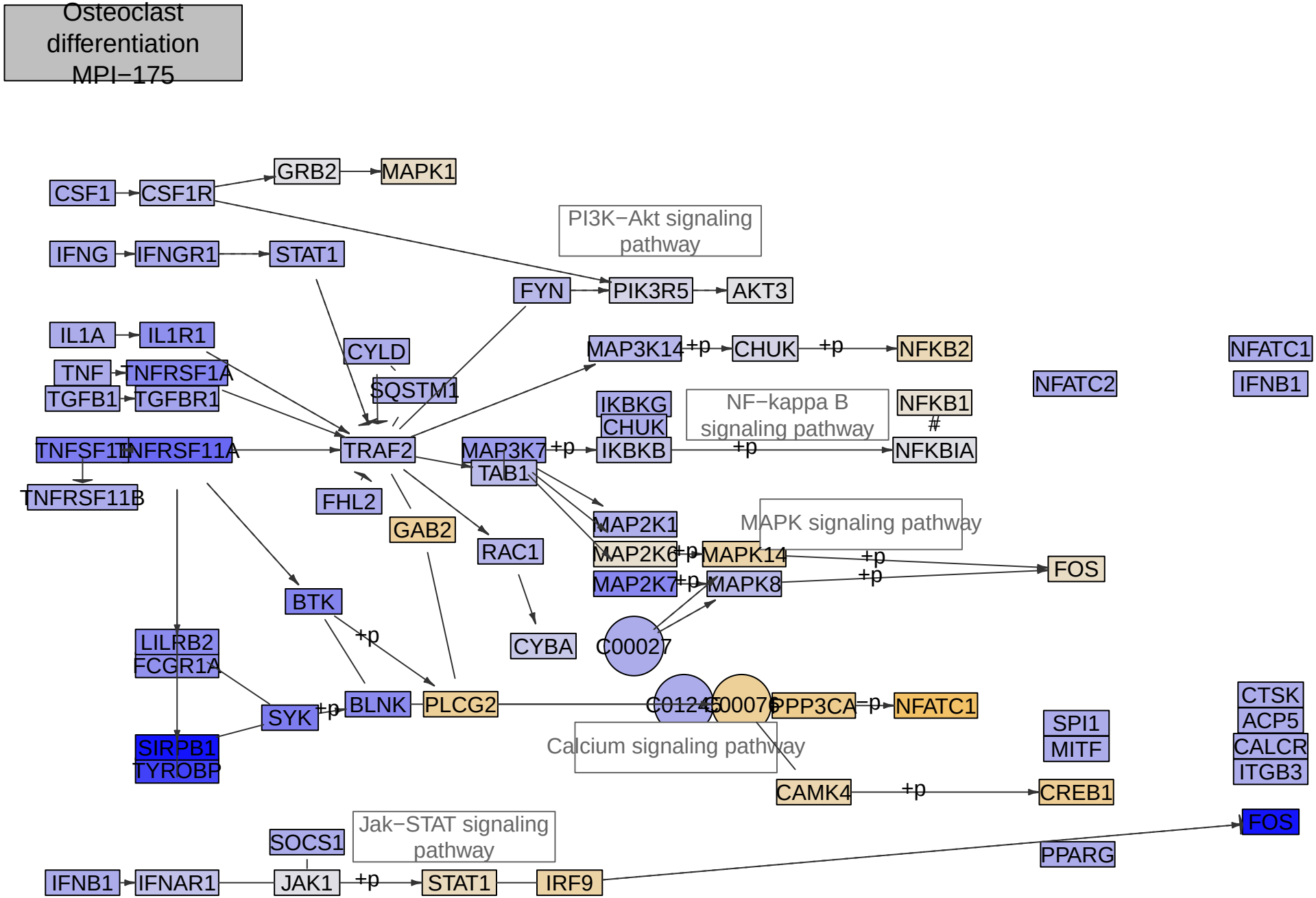
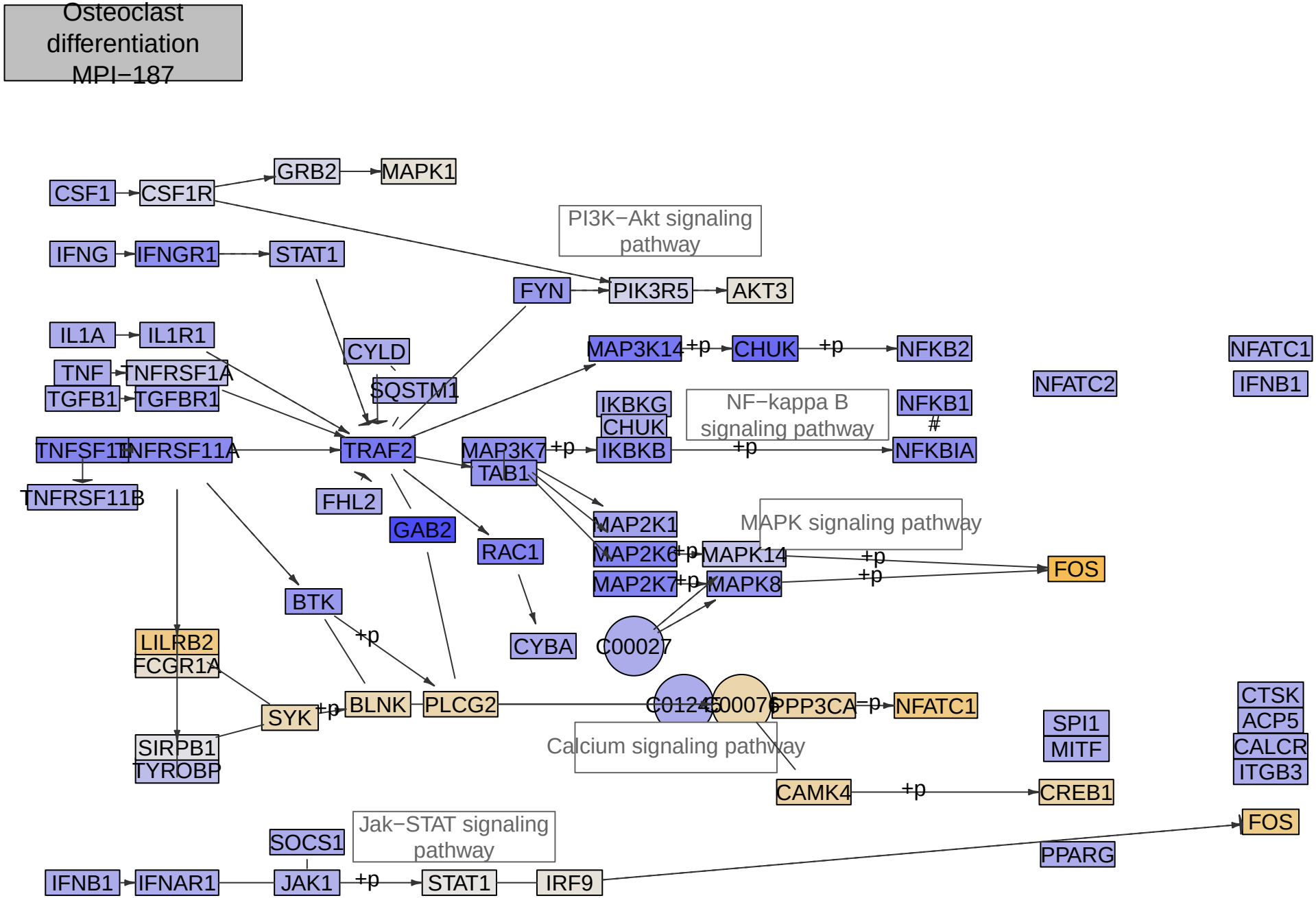
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−162
CSF1
CSF1R
GRB2
MAPK1
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−165
GRB2
MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−169
GRB2
MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−175
GRB2
MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−187
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MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
=p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
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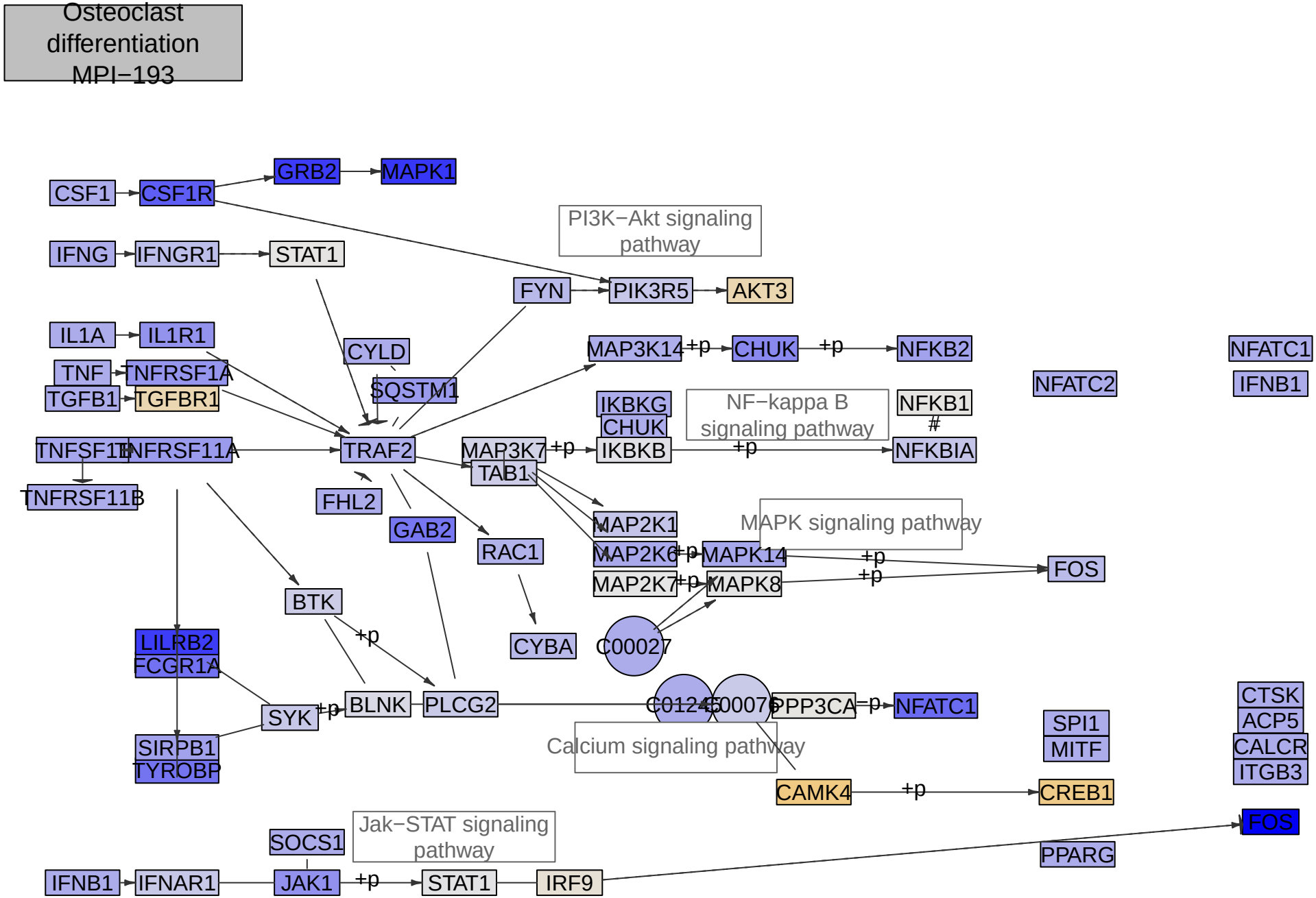
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−193
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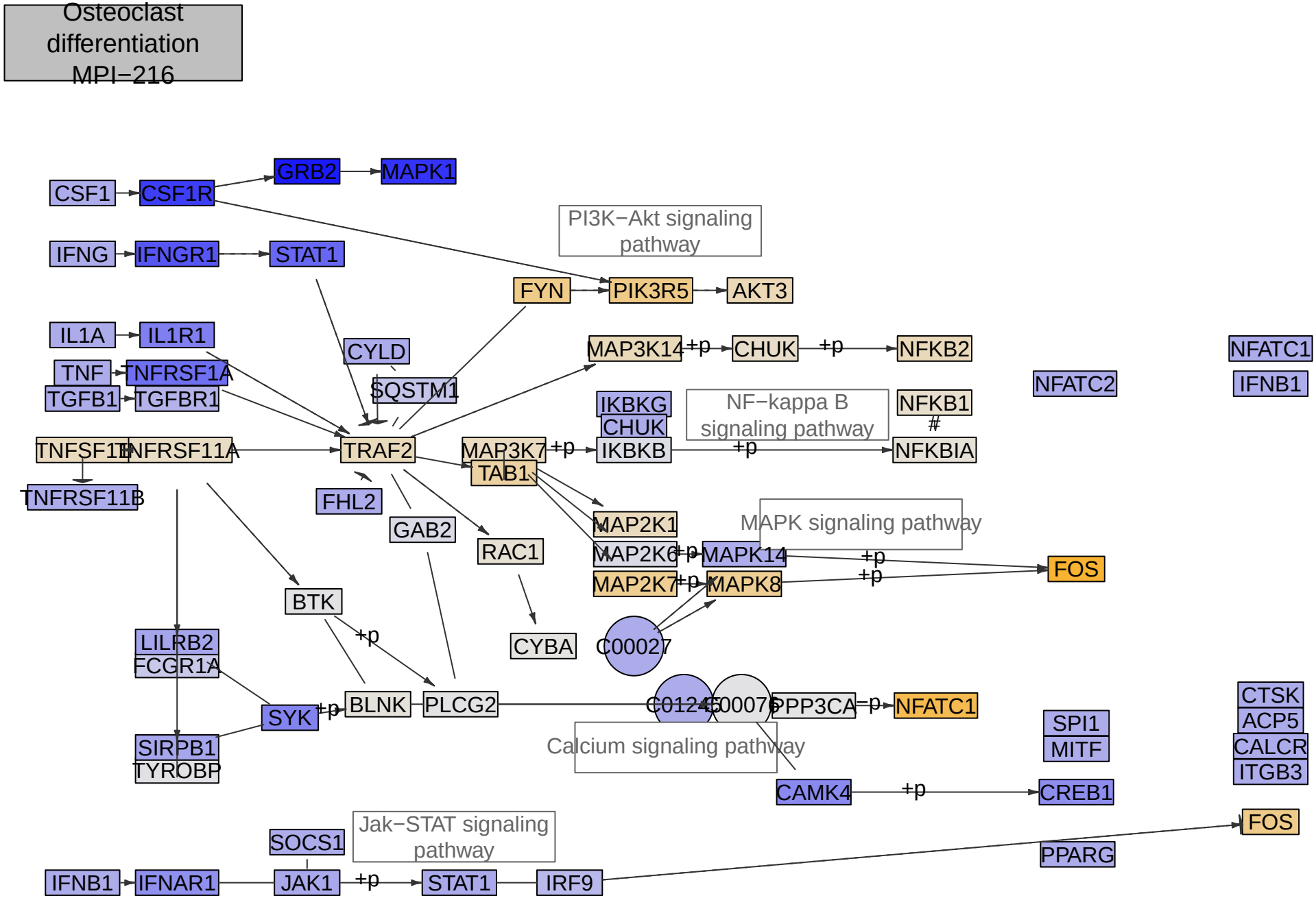
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−216
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MAPK1
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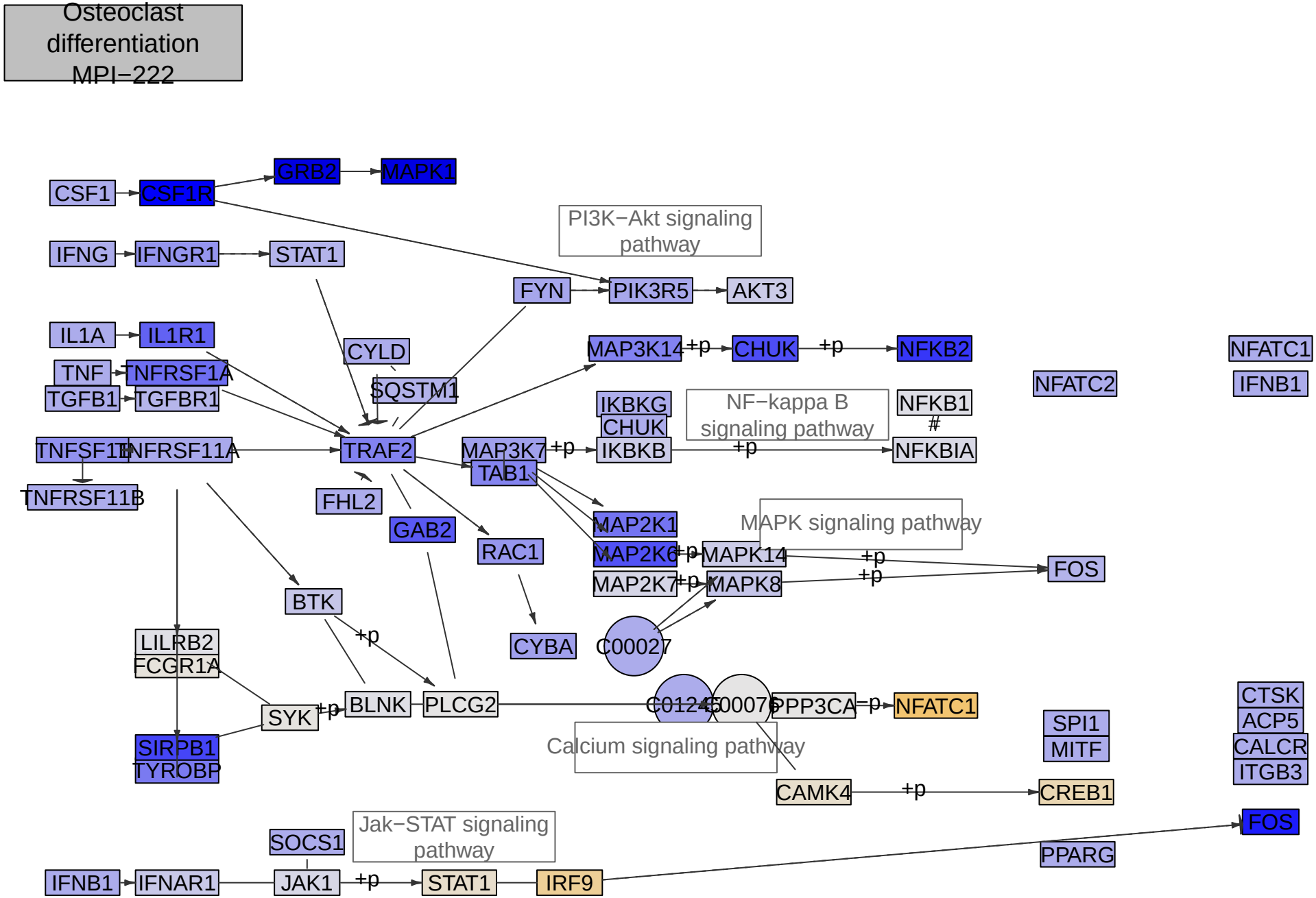
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9
PPARG


Osteoclast differentiation MPI−222
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MAPK1
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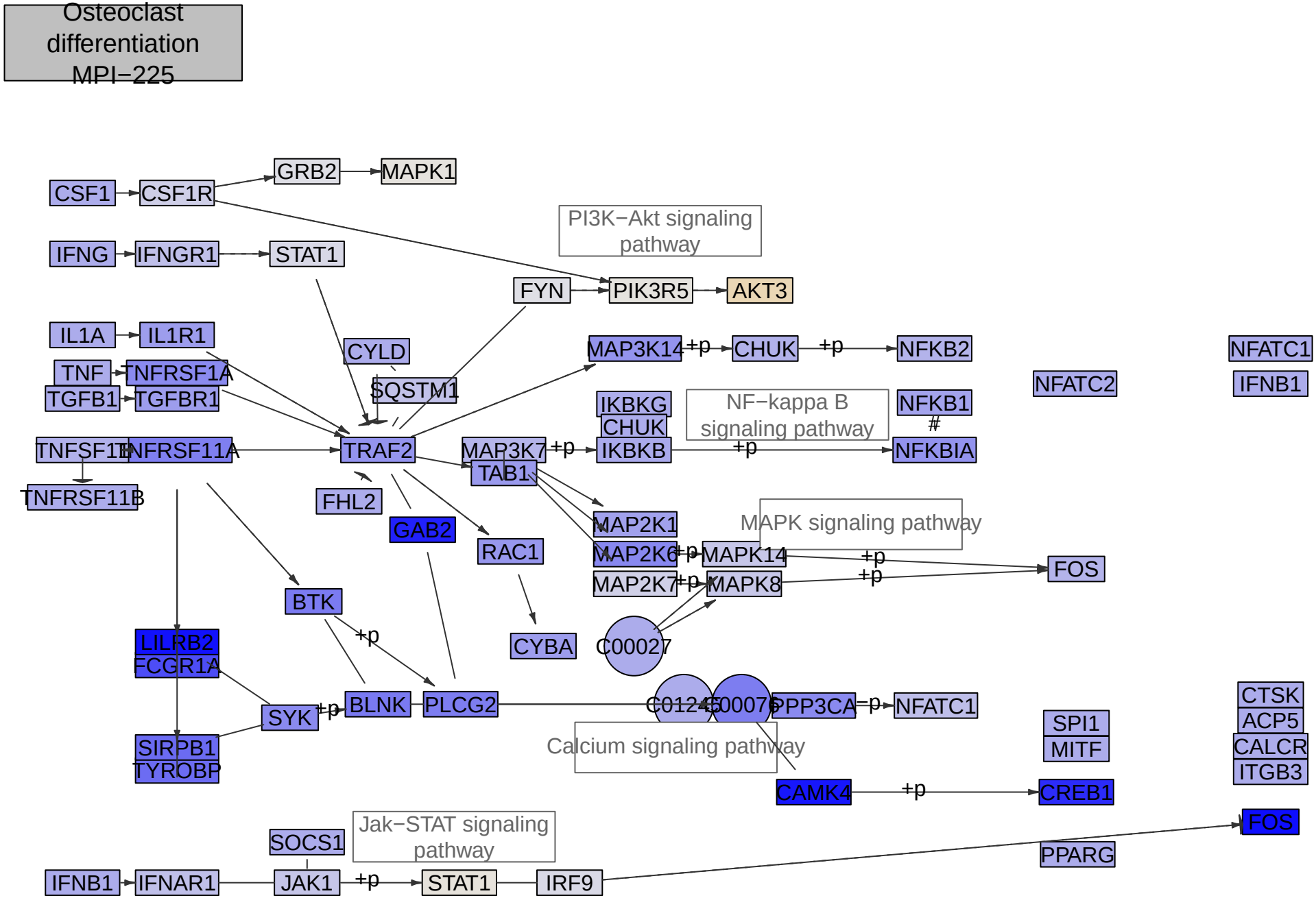
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−225
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CSF1R
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PI3K−Akt signaling pathway
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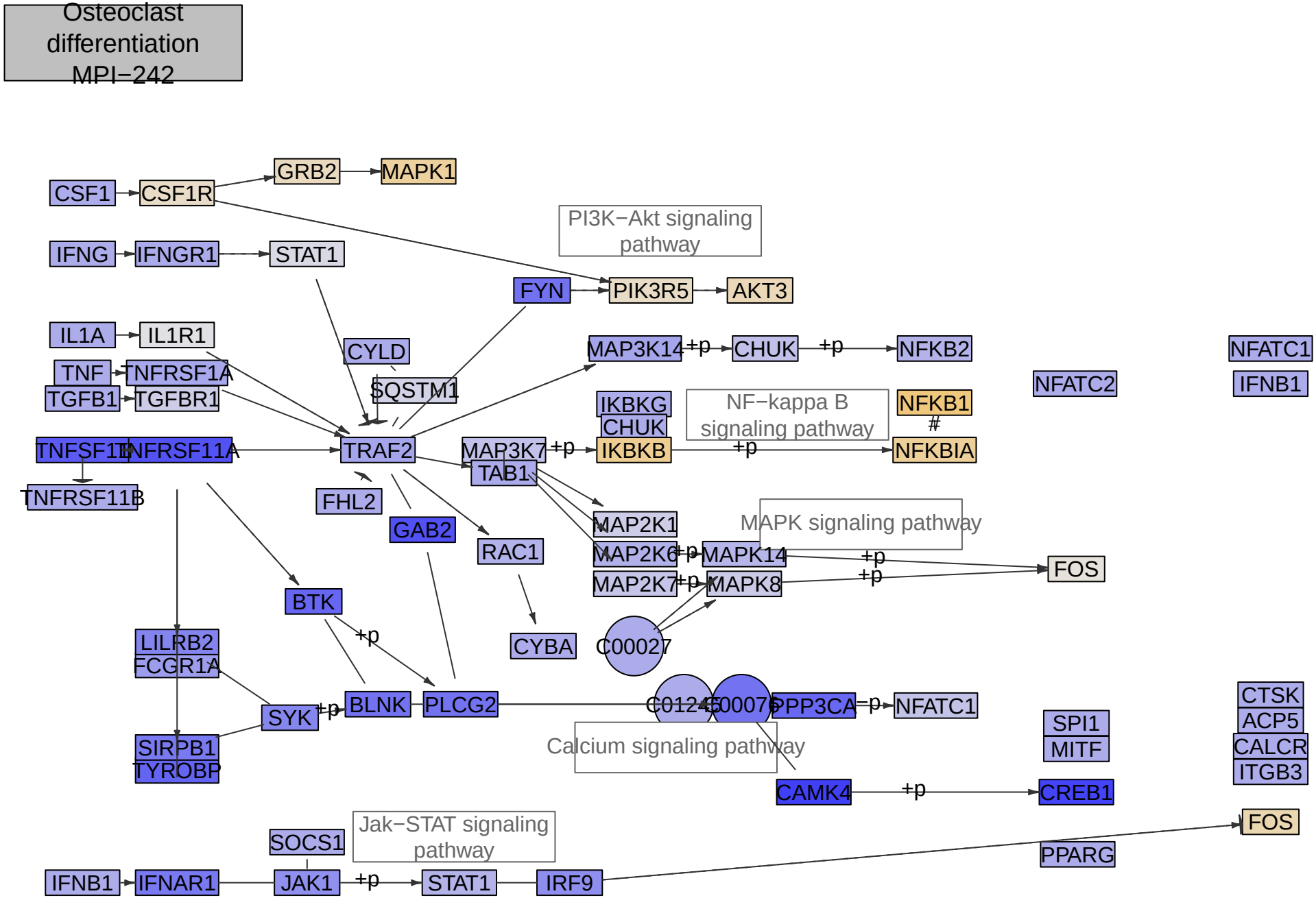
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−242
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CSF1R
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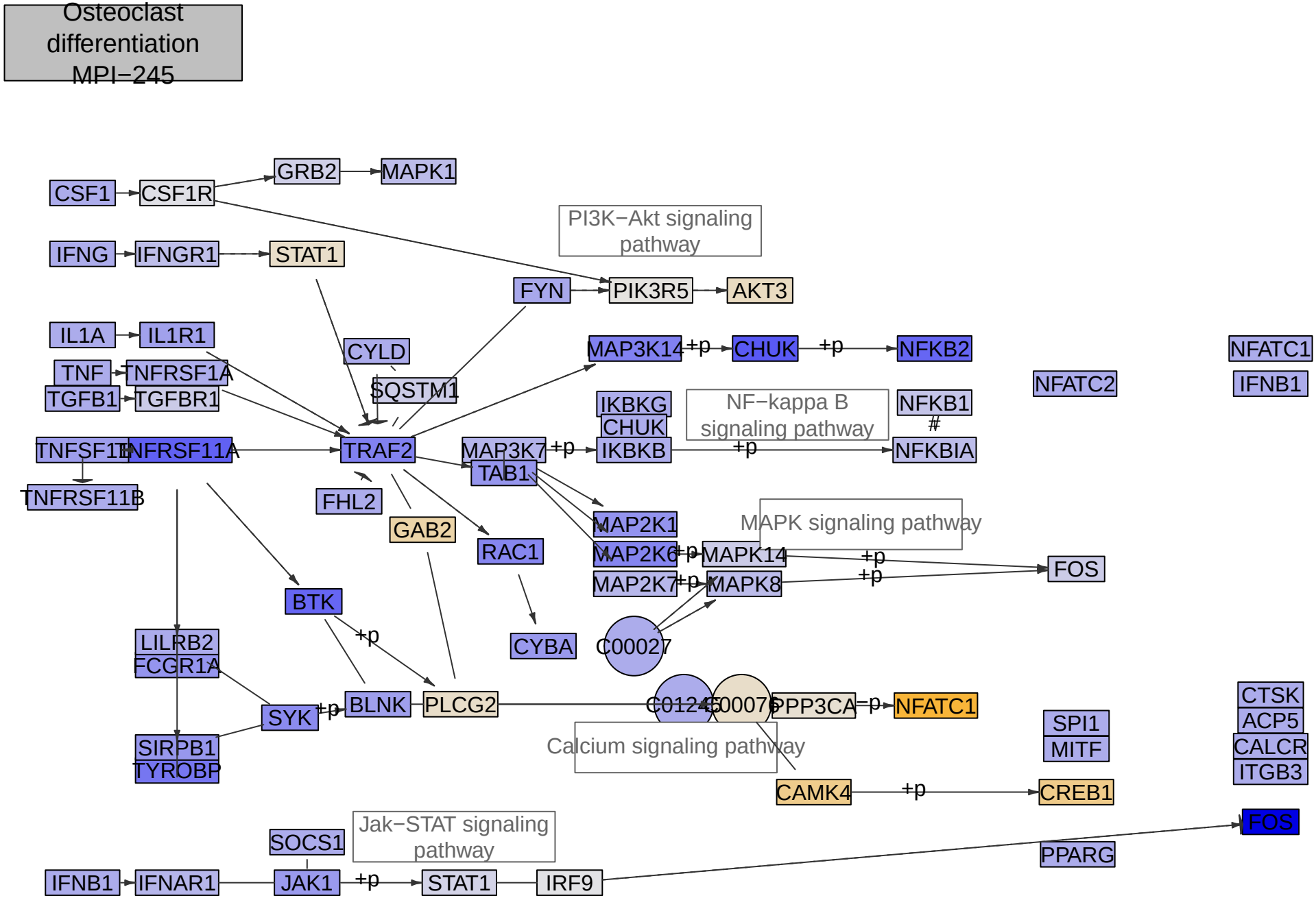
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−245
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CSF1R
PI3K−Akt signaling pathway
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IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
CAMK4
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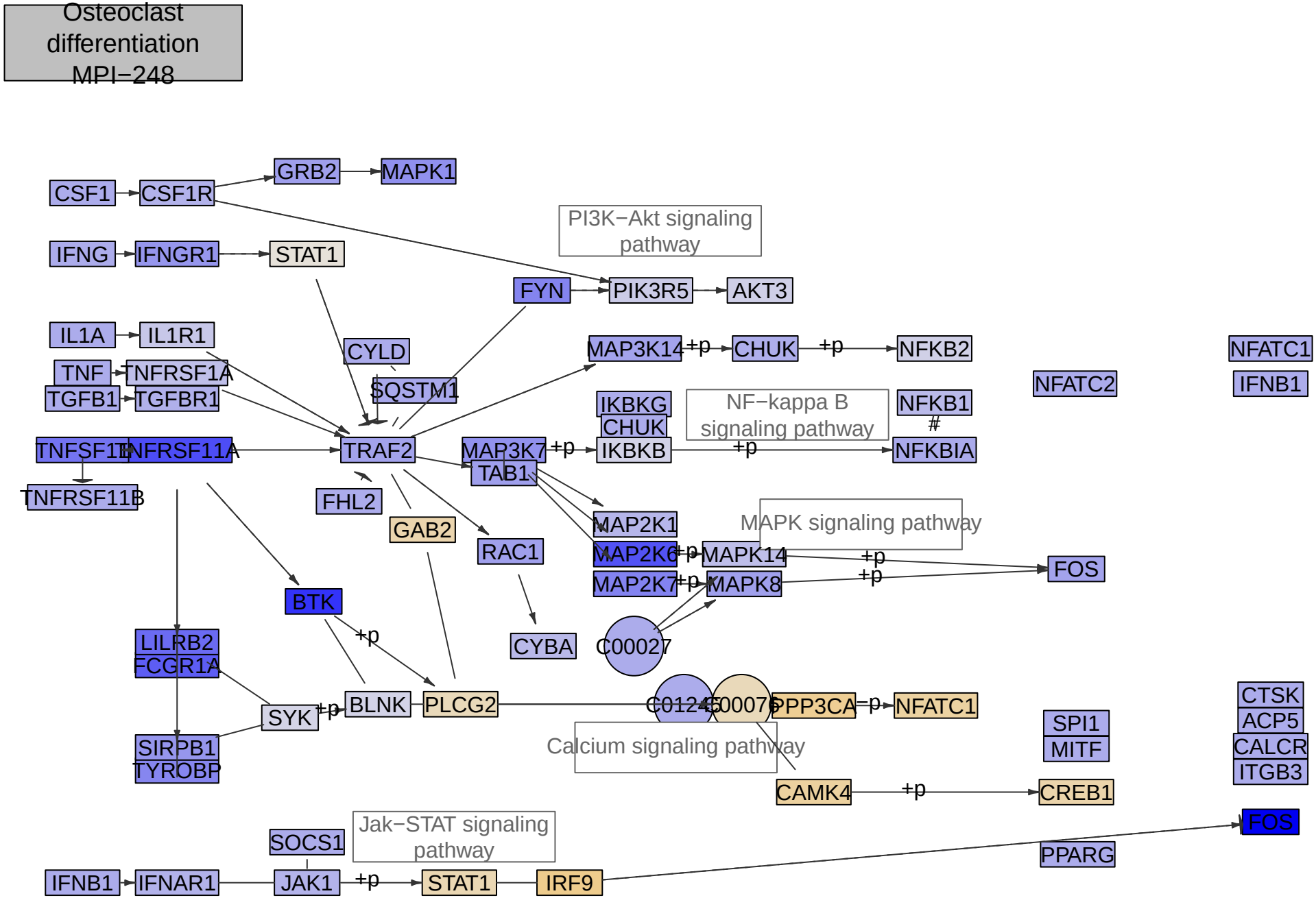
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−248
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CSF1R
PI3K−Akt signaling pathway
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IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
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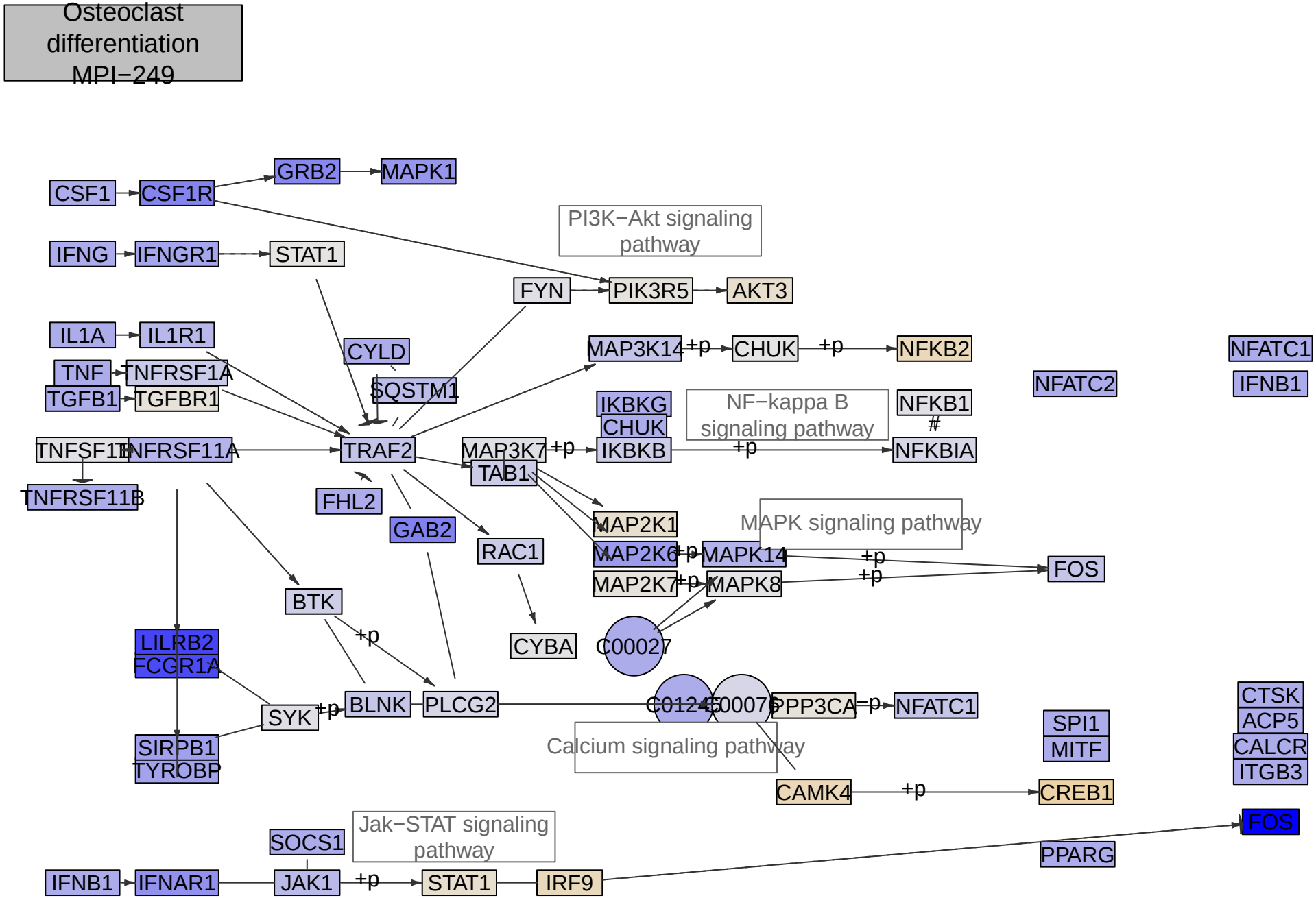
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9
PPARG


Osteoclast differentiation MPI−249
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PI3K−Akt signaling pathway
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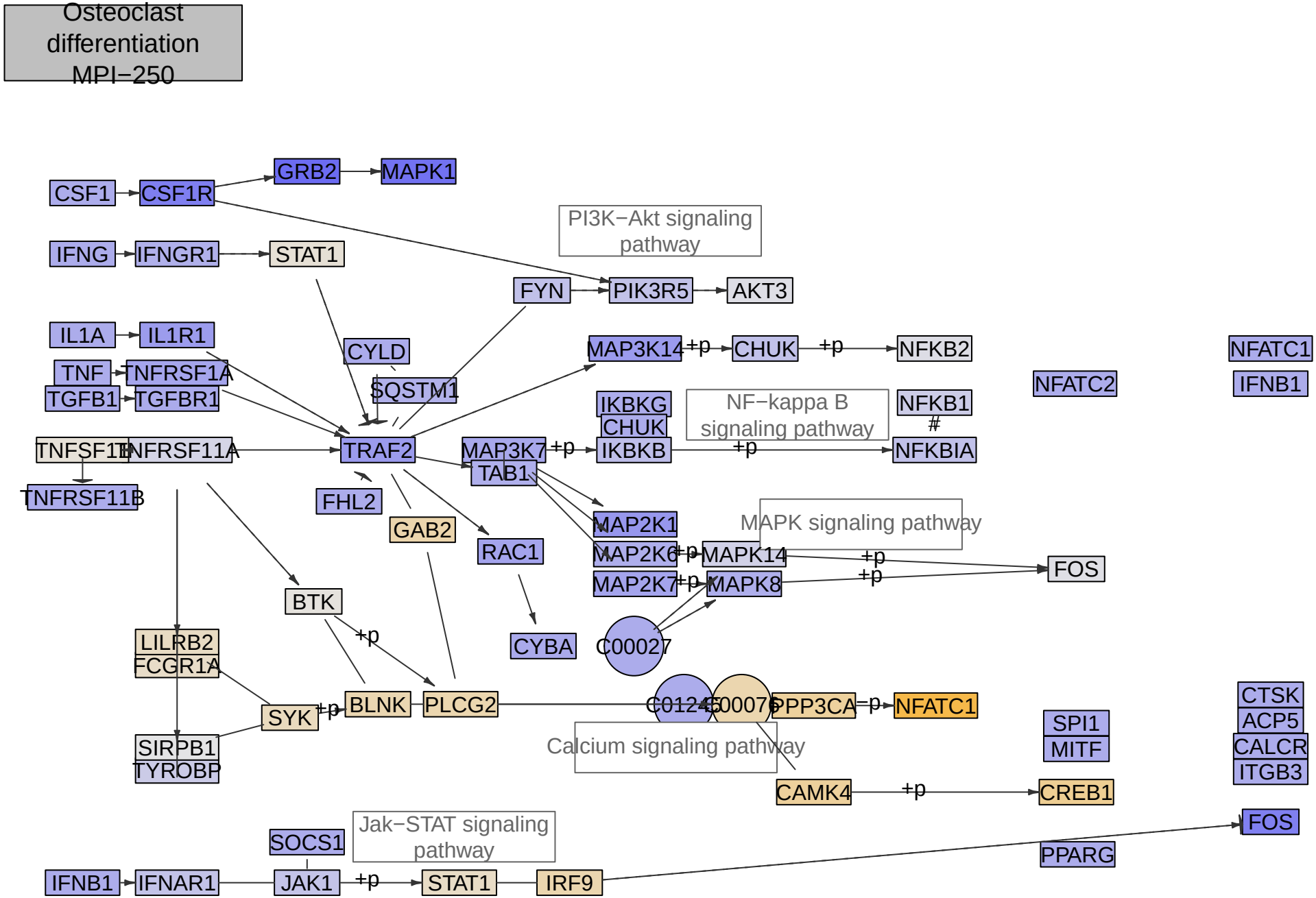
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9
PPARG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IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
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CREB1
FOS
SOCS1
Jak−STAT signaling pathway
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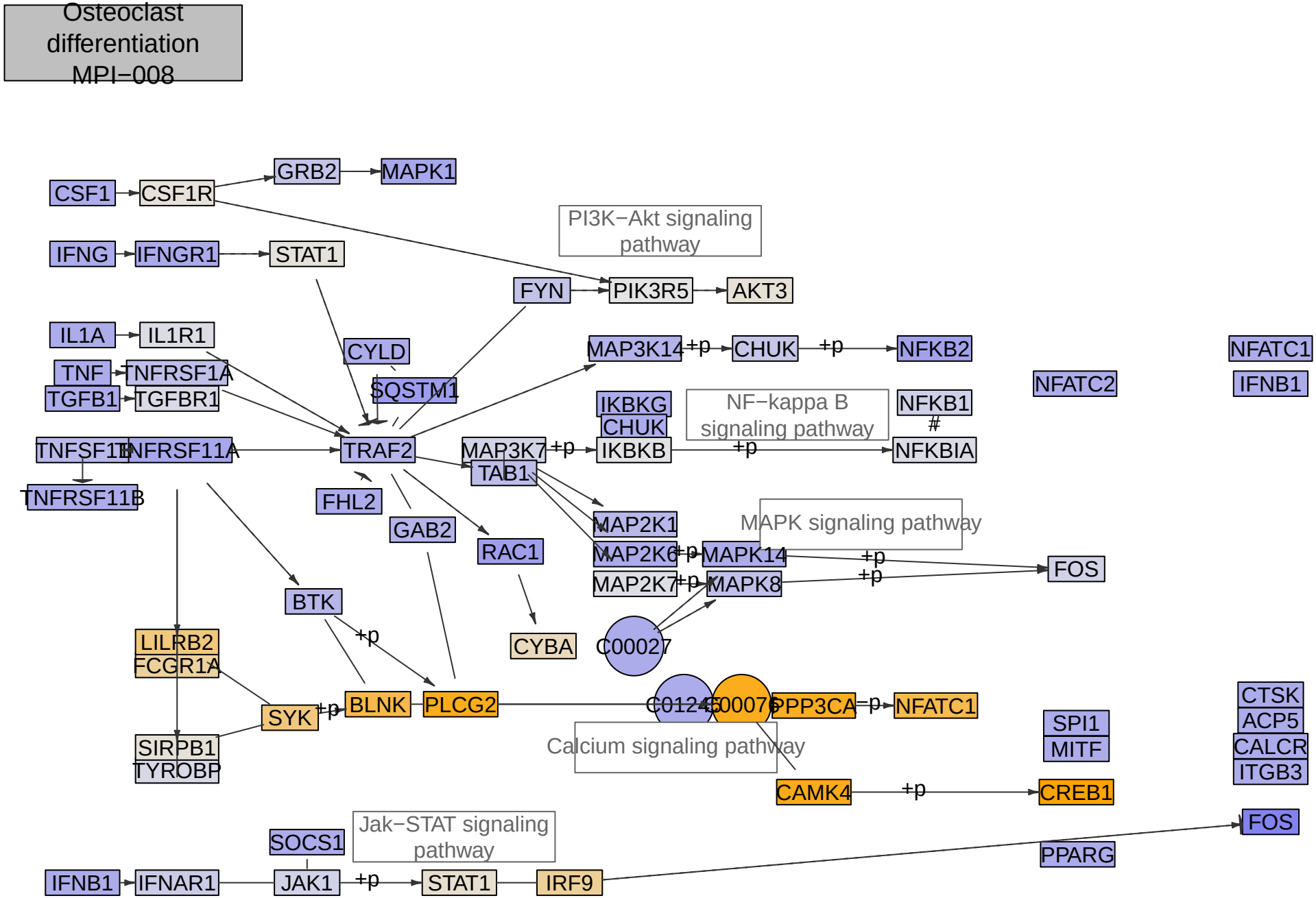
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9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PI3K−Akt signaling pathway
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STAT1
FYN
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AKT3
IL1A
IL1R1
CYLD
MAP3K14
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CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
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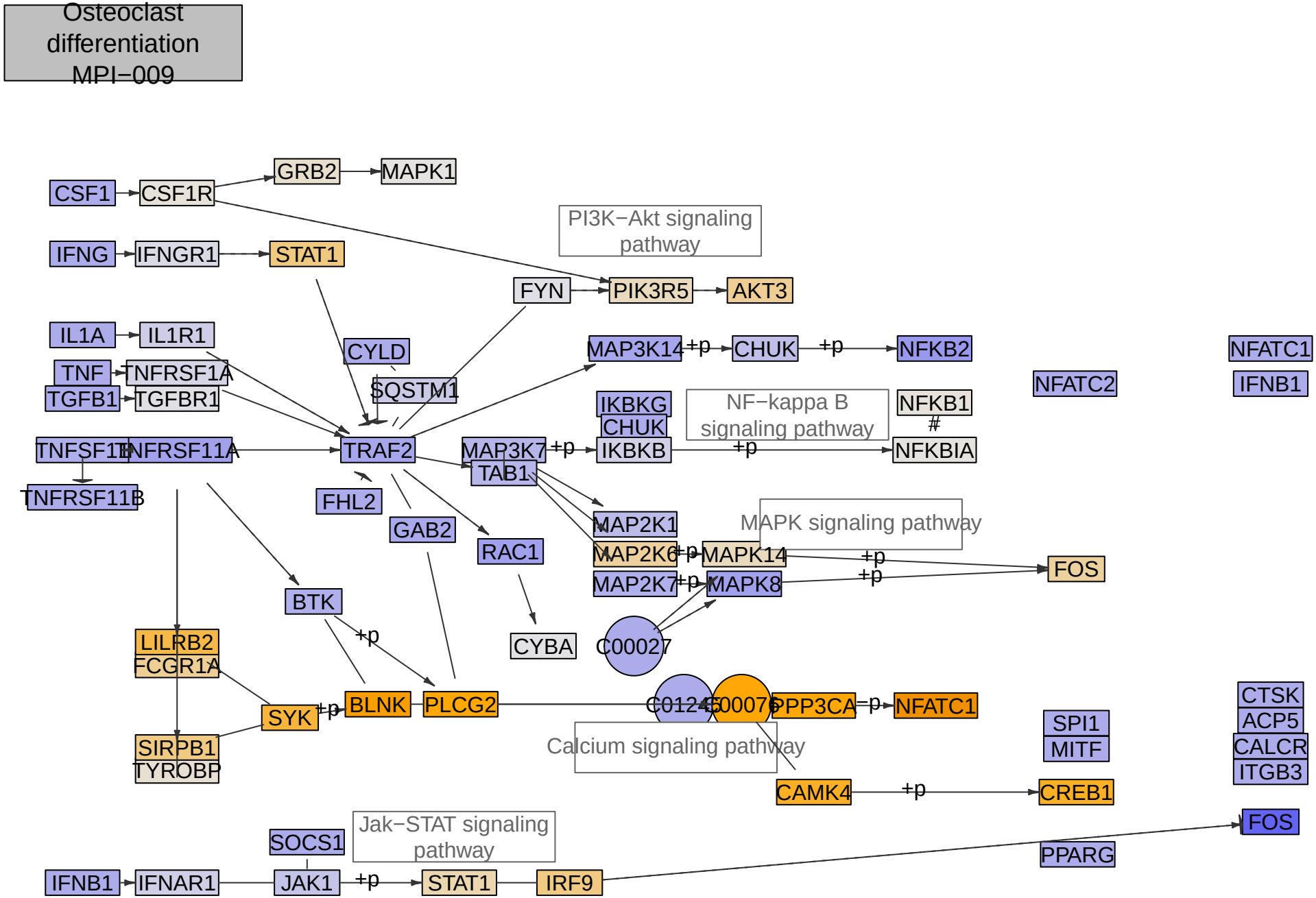
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9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PI3K−Akt signaling pathway
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FYN
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AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
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CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
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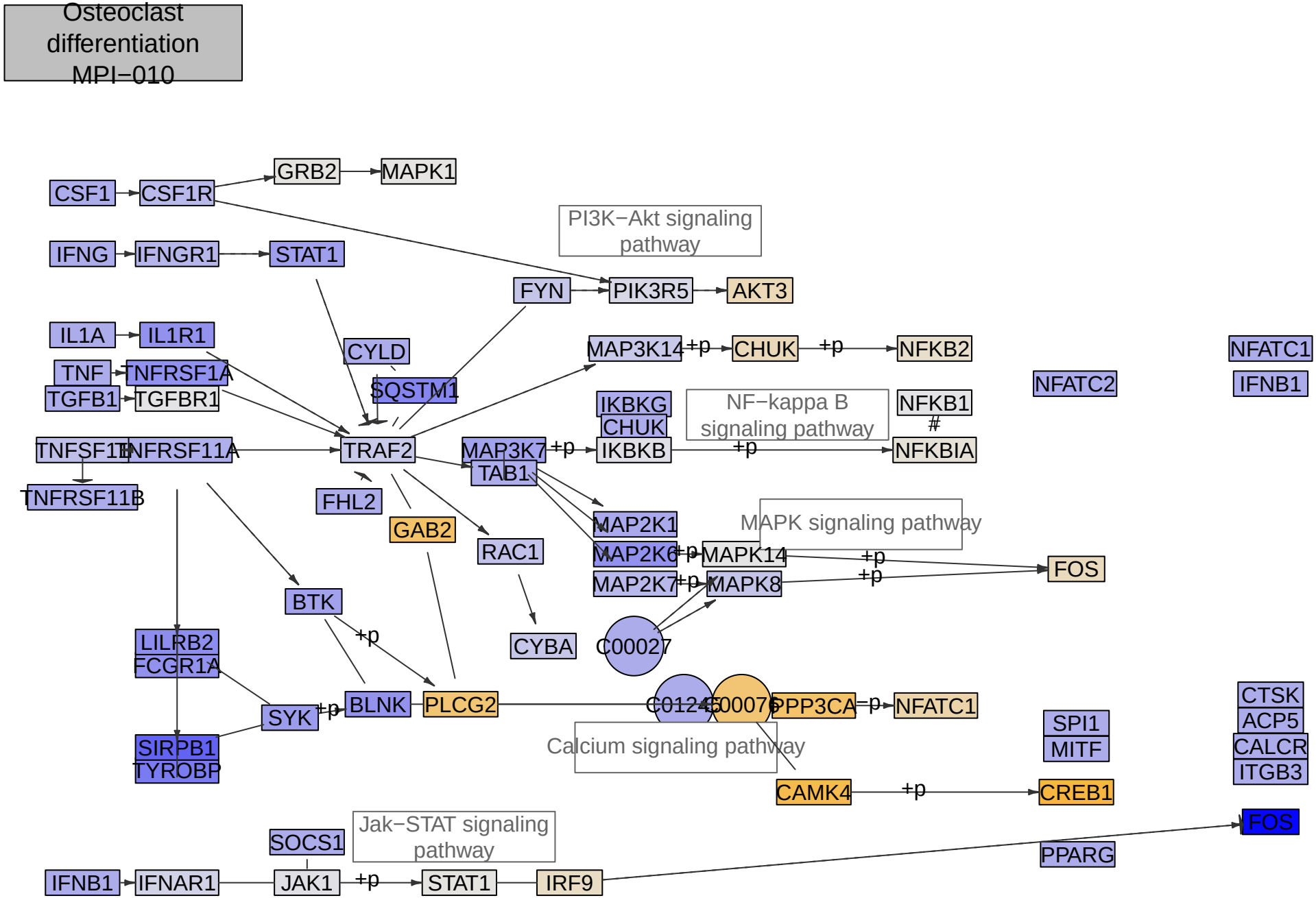
STAT1
IRF9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PI3K−Akt signaling pathway
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IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
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MITF
CTSK
ACP5
CALCR
ITGB3
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SOCS1
Jak−STAT signaling pathway
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IFNB1
IFNAR1
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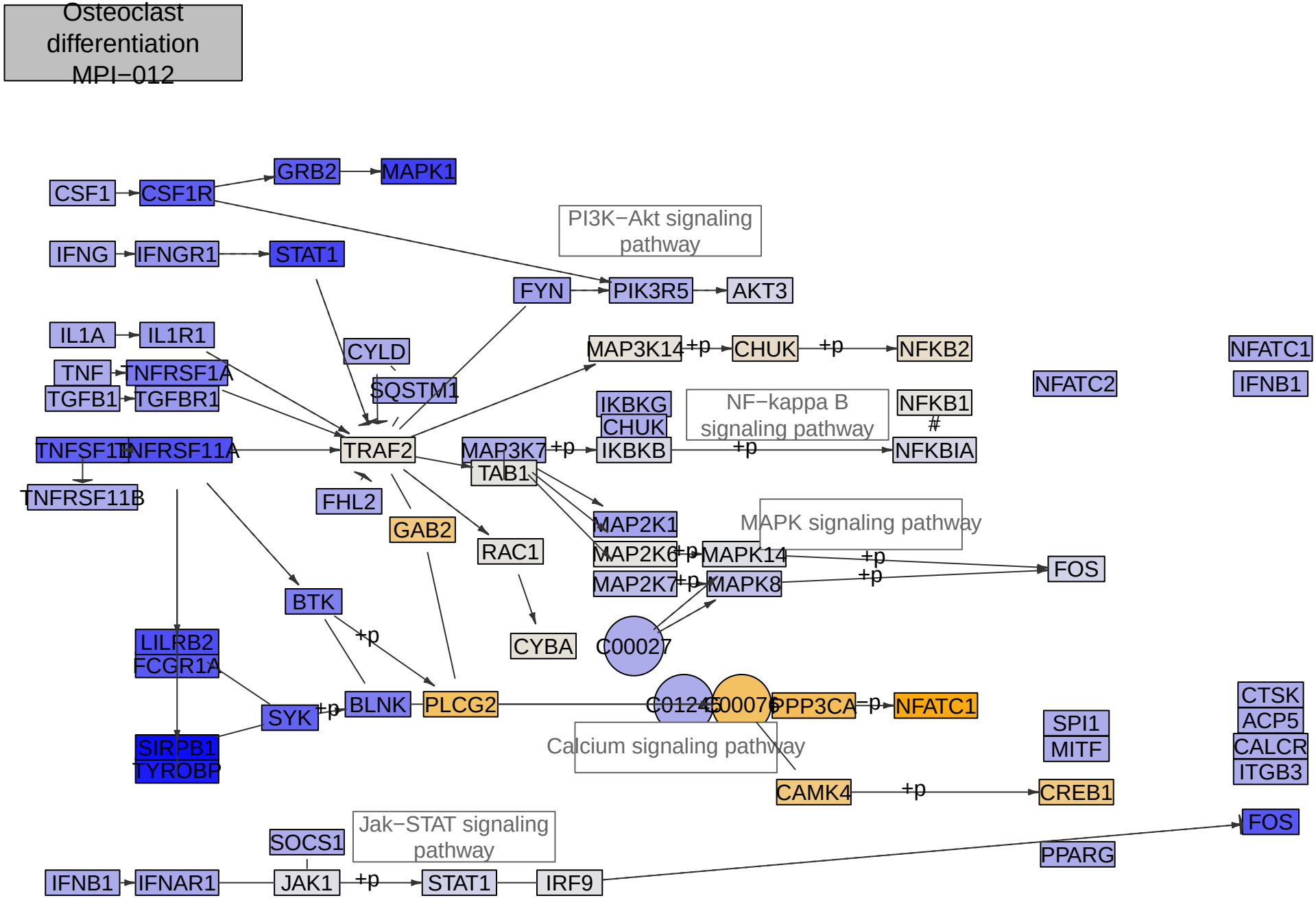
STAT1
IRF9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STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
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NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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SOCS1
Jak−STAT signaling pathway
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IFNAR1
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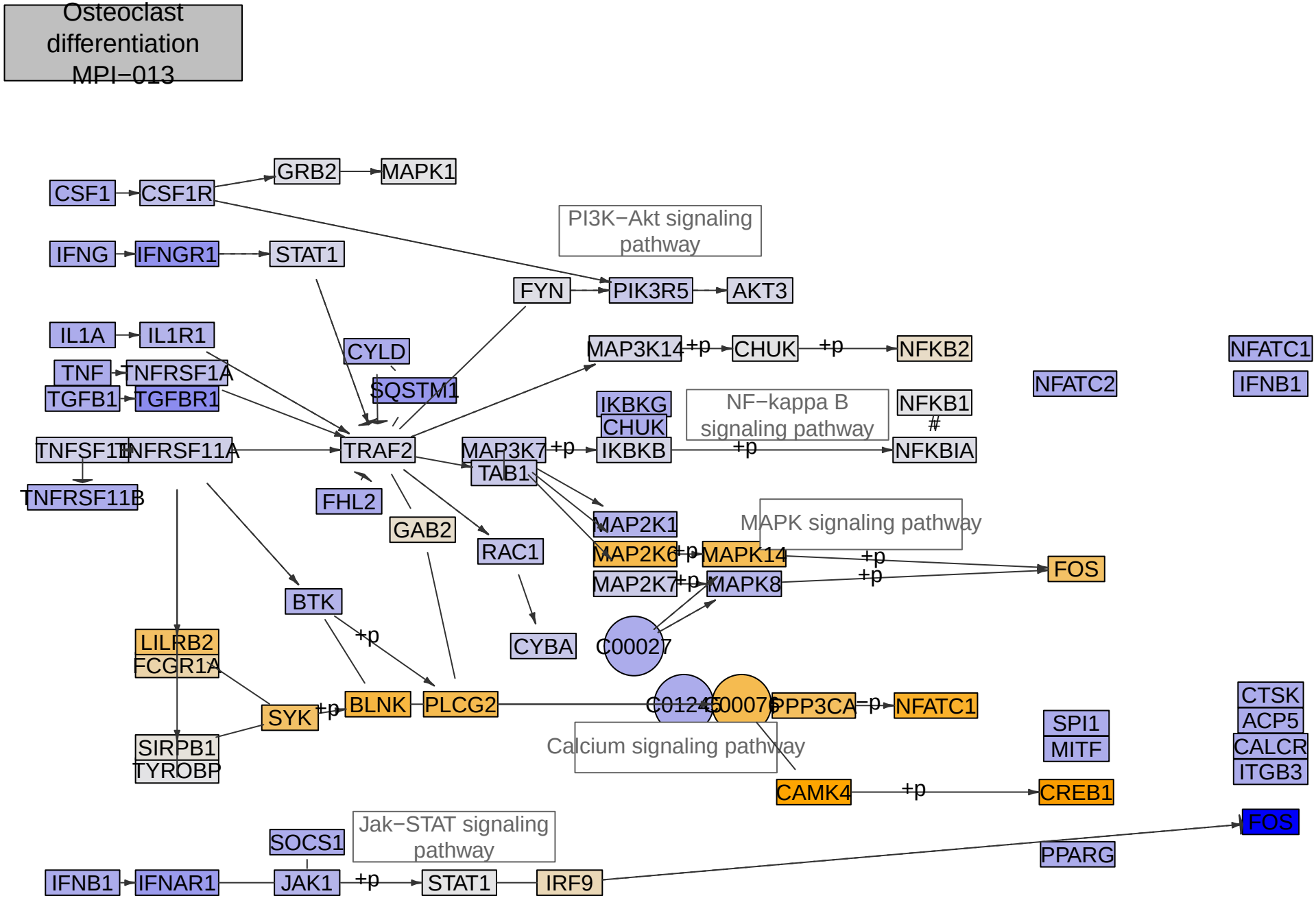
STAT1
IRF9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CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
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CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
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SOCS1
Jak−STAT signaling pathway
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IFNAR1
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STAT1
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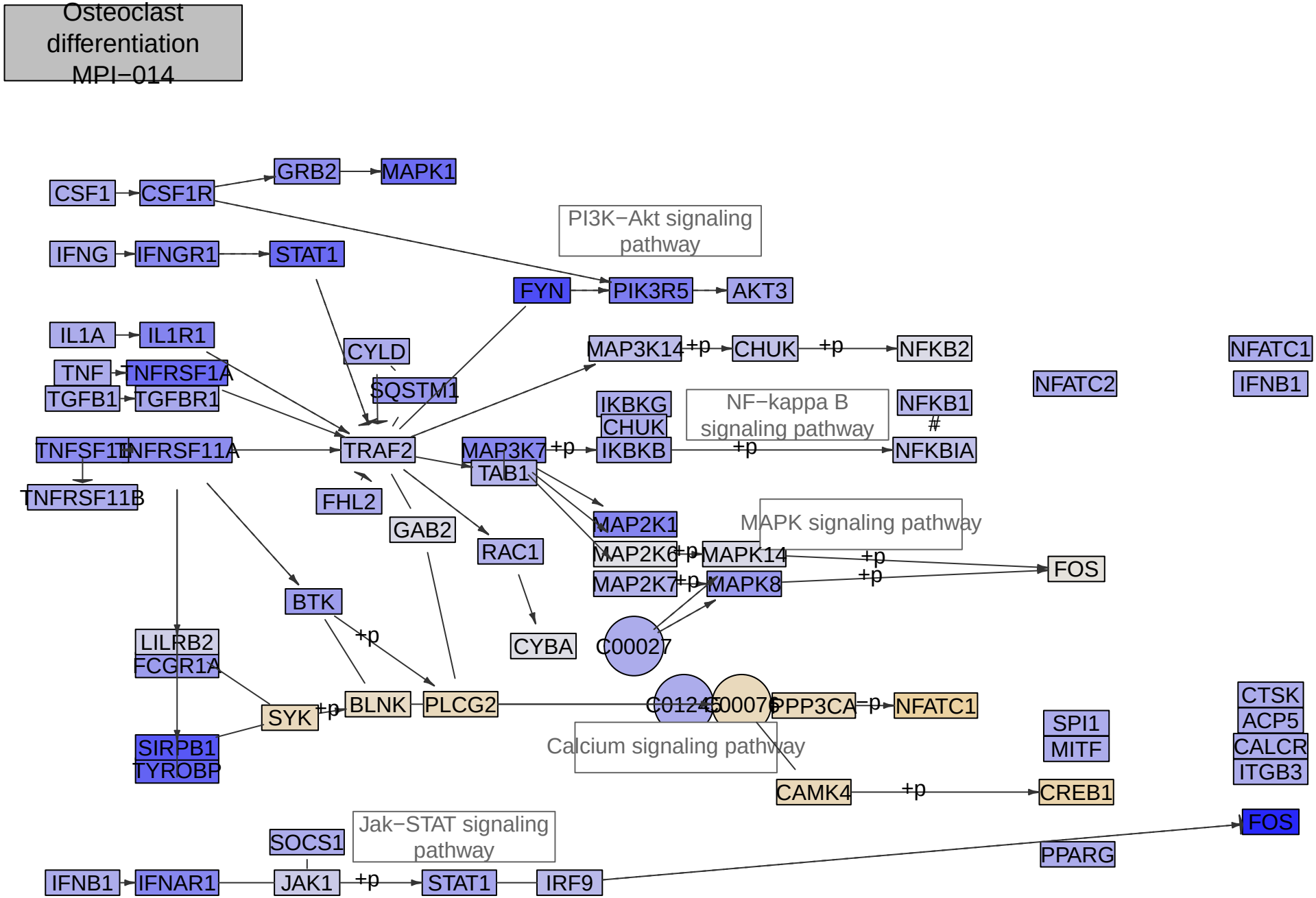
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
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NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
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BLNK
PLCG2
C01245
C00076
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SPI1
MITF
CTSK
ACP5
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ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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SOCS1
Jak−STAT signaling pathway
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IFNAR1
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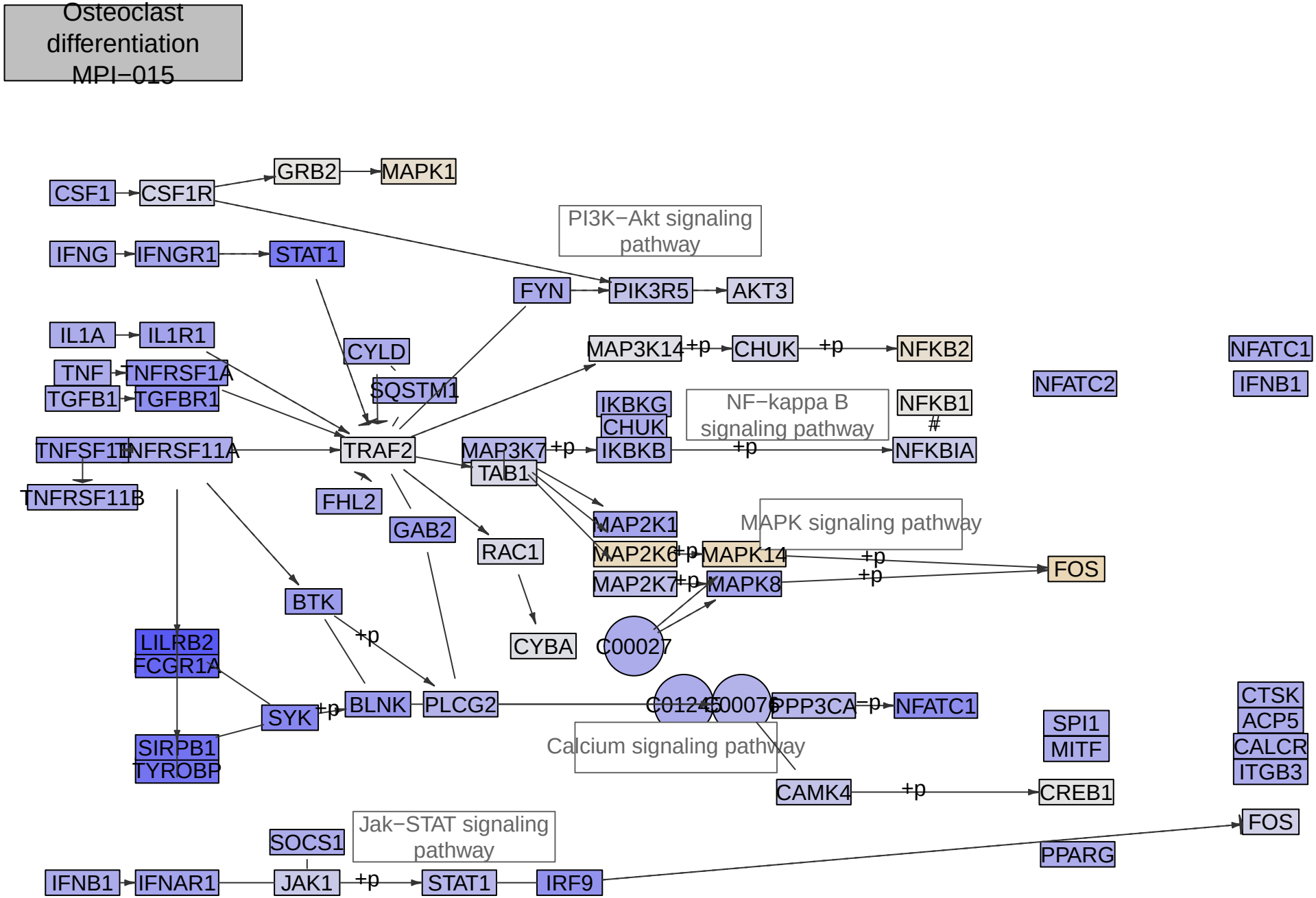
STAT1
IRF9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CYLD
MAP3K14
+p
CHUK
+p
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TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
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BLNK
PLCG2
C01245
C00076
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SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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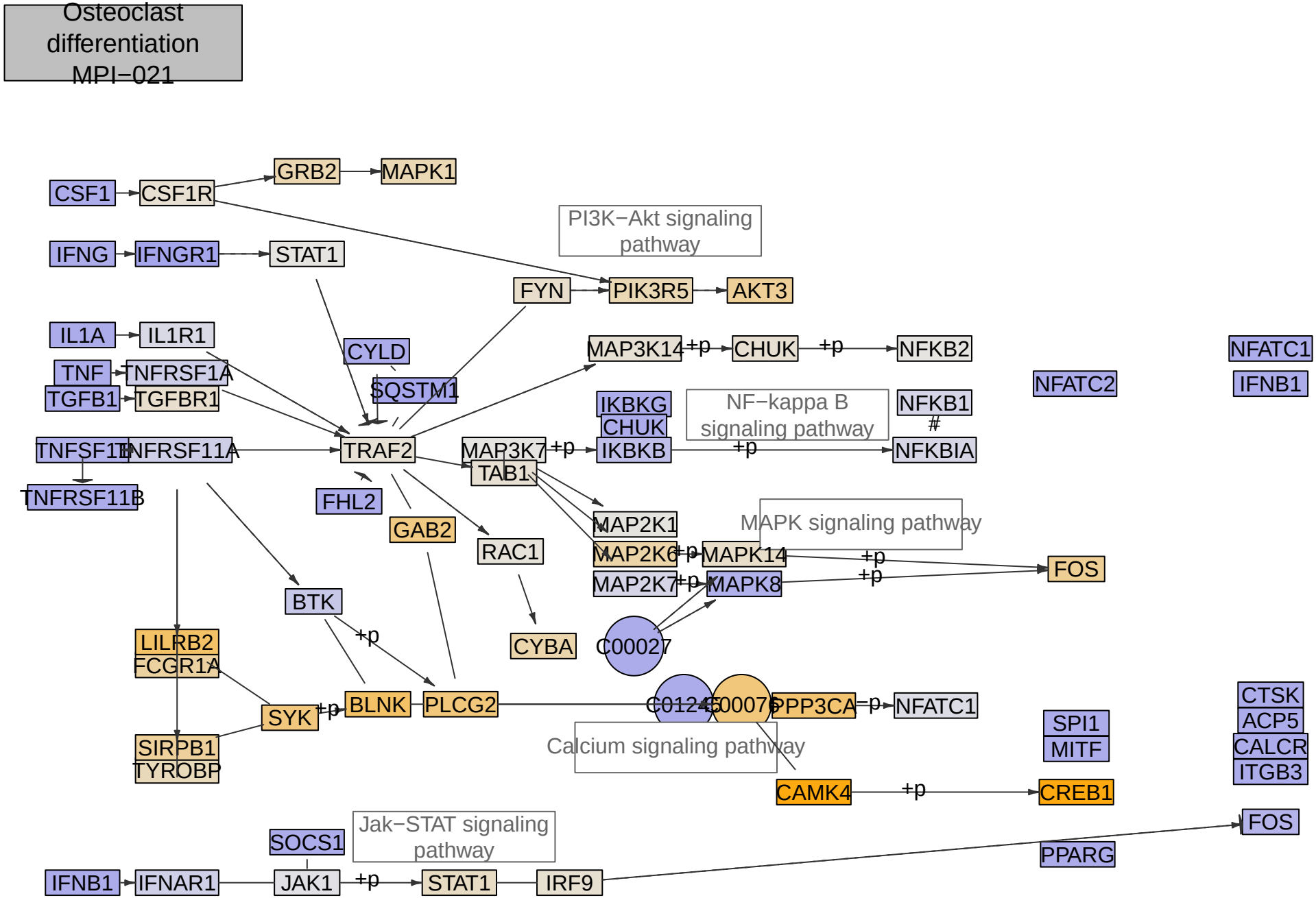
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9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CYLD
MAP3K14
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CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
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IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
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CYBA
C00027
SYK
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BLNK
PLCG2
C01245
C00076
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ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
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CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
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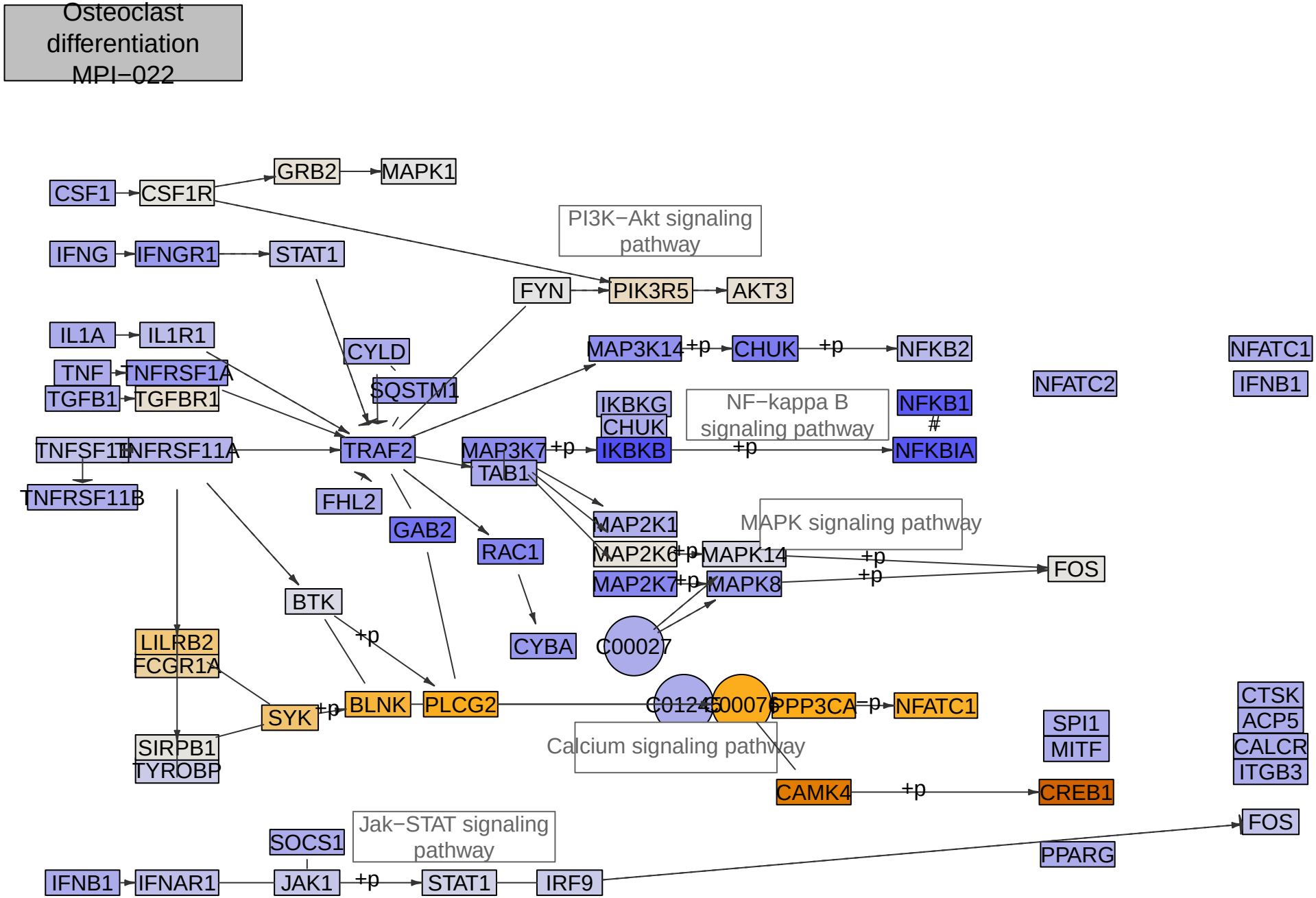
+p
STAT1
IRF9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CYLD
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TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
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BLNK
PLCG2
C01245
C00076
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SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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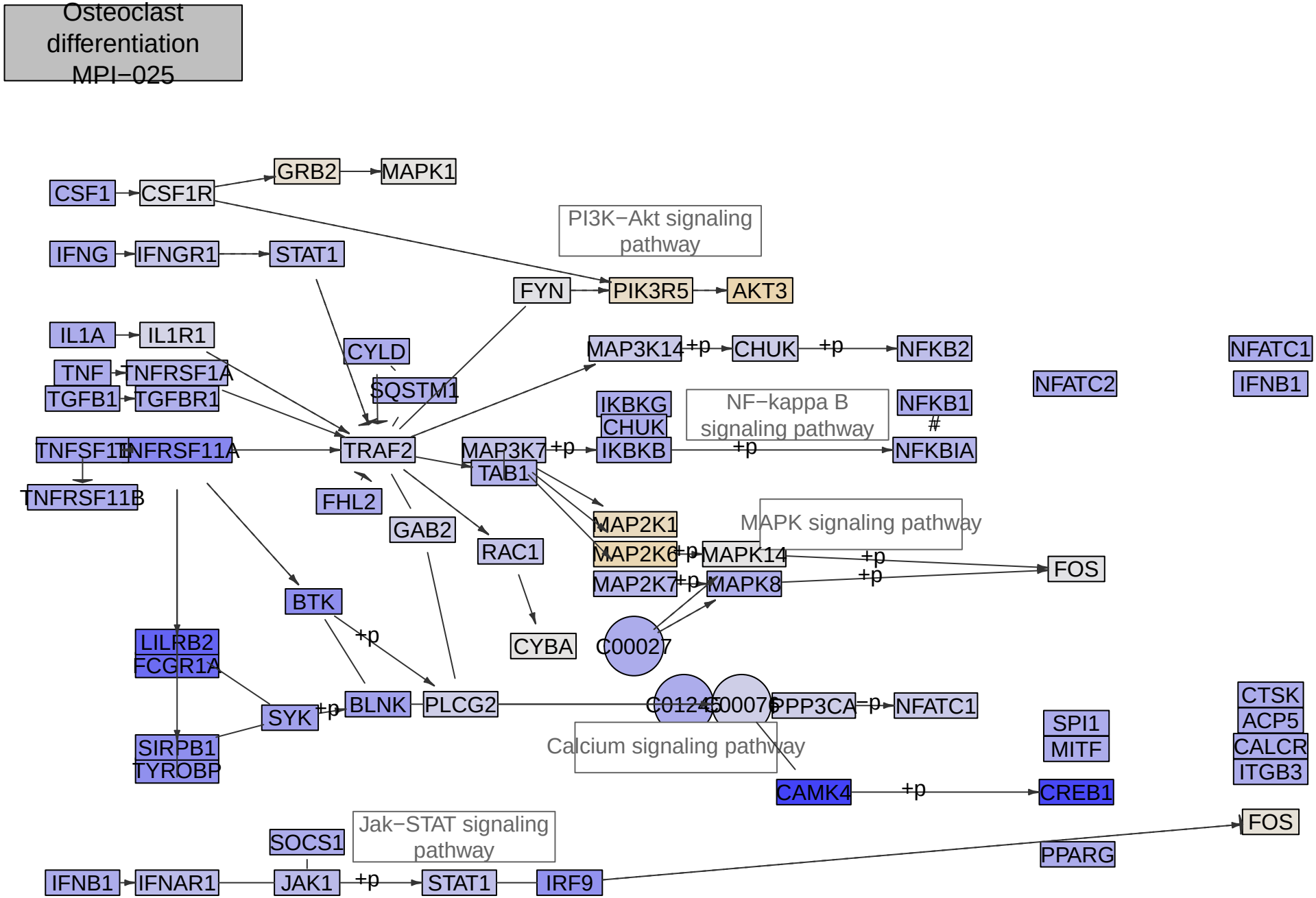
Jak−STAT signaling pathway
SOCS1
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9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STAT1
FYN
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AKT3
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CYLD
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CHUK
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NFATC1
TNF
TNFRSF1A
SQSTM1
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IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFSF11
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TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
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CYBA
C00027
SYK
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BLNK
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SPI1
MITF
CTSK
ACP5
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ITGB3
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TYROBP
Calcium signaling pathway
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SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
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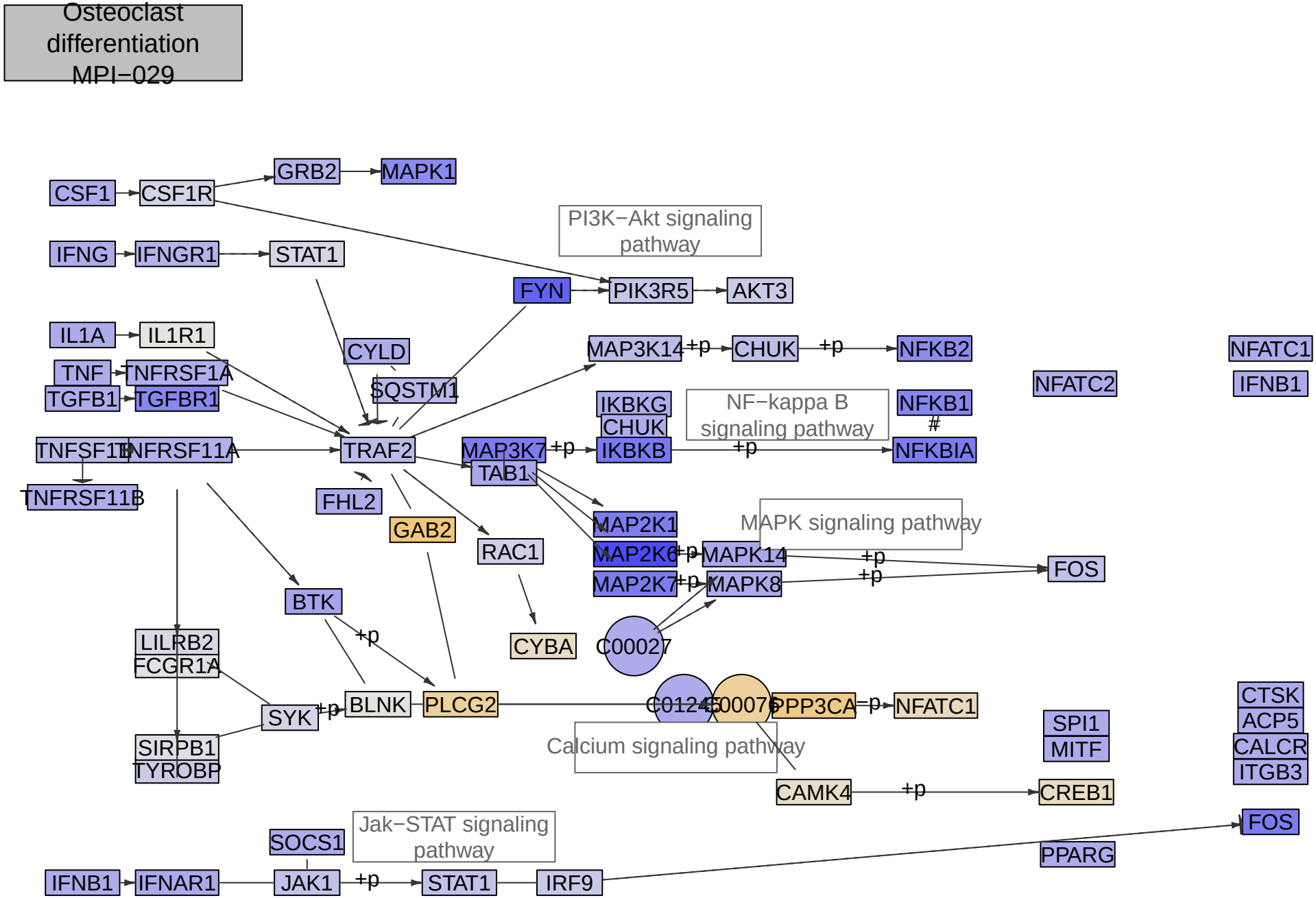
STAT1
IRF9


Osteoclast differentiation MPI−029
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STAT1
FYN
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AKT3
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CYLD
MAP3K14
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+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
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CYBA
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CTSK
ACP5
SPI1
MITF
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Calcium signaling pathway
CALCR
ITGB3
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SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
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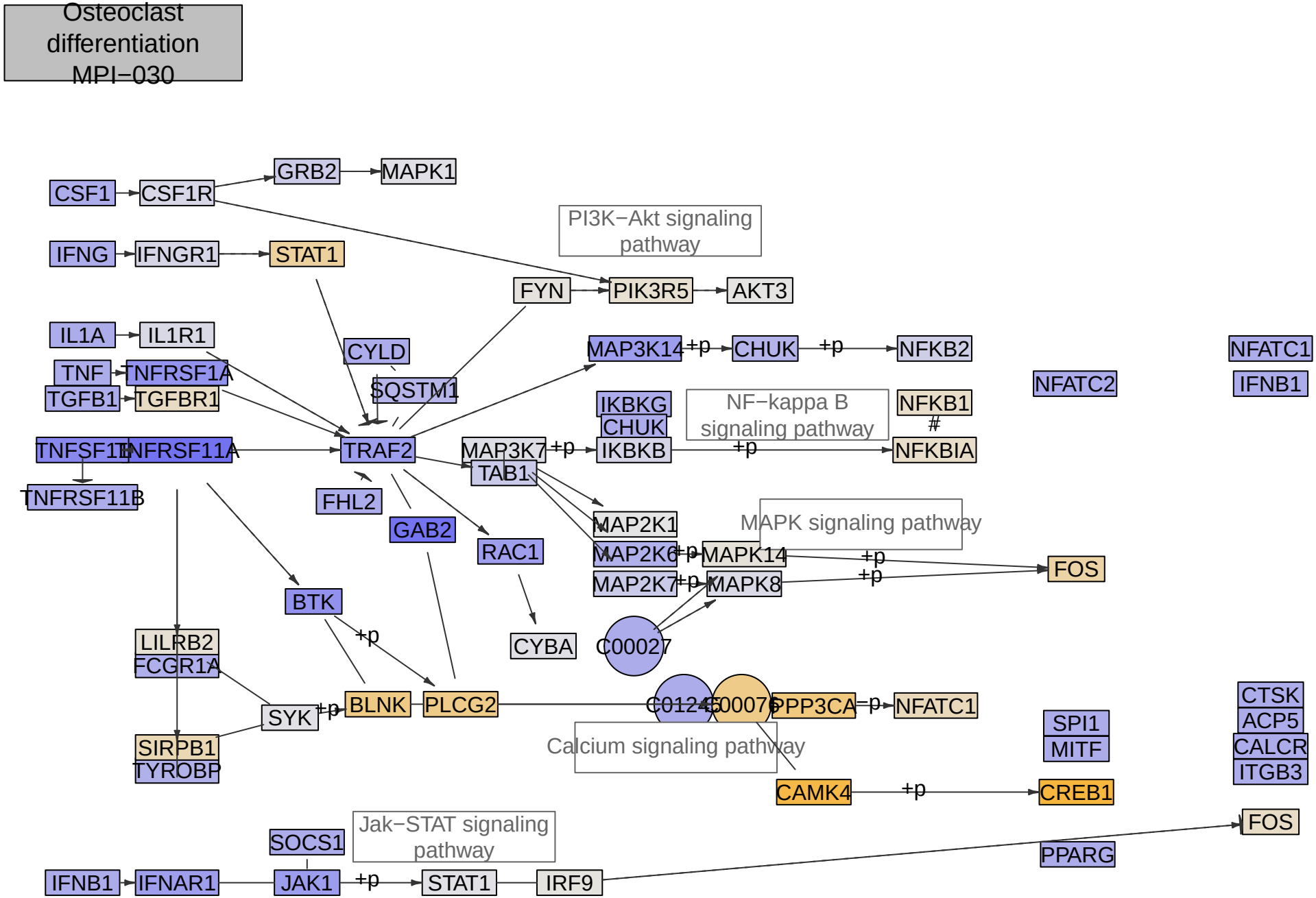
+p
STAT1
IRF9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STAT1
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CYLD
MAP3K14
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CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
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MITF
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TYROBP
Calcium signaling pathway
CALCR
ITGB3
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Jak−STAT signaling pathway
FOS
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IFNAR1
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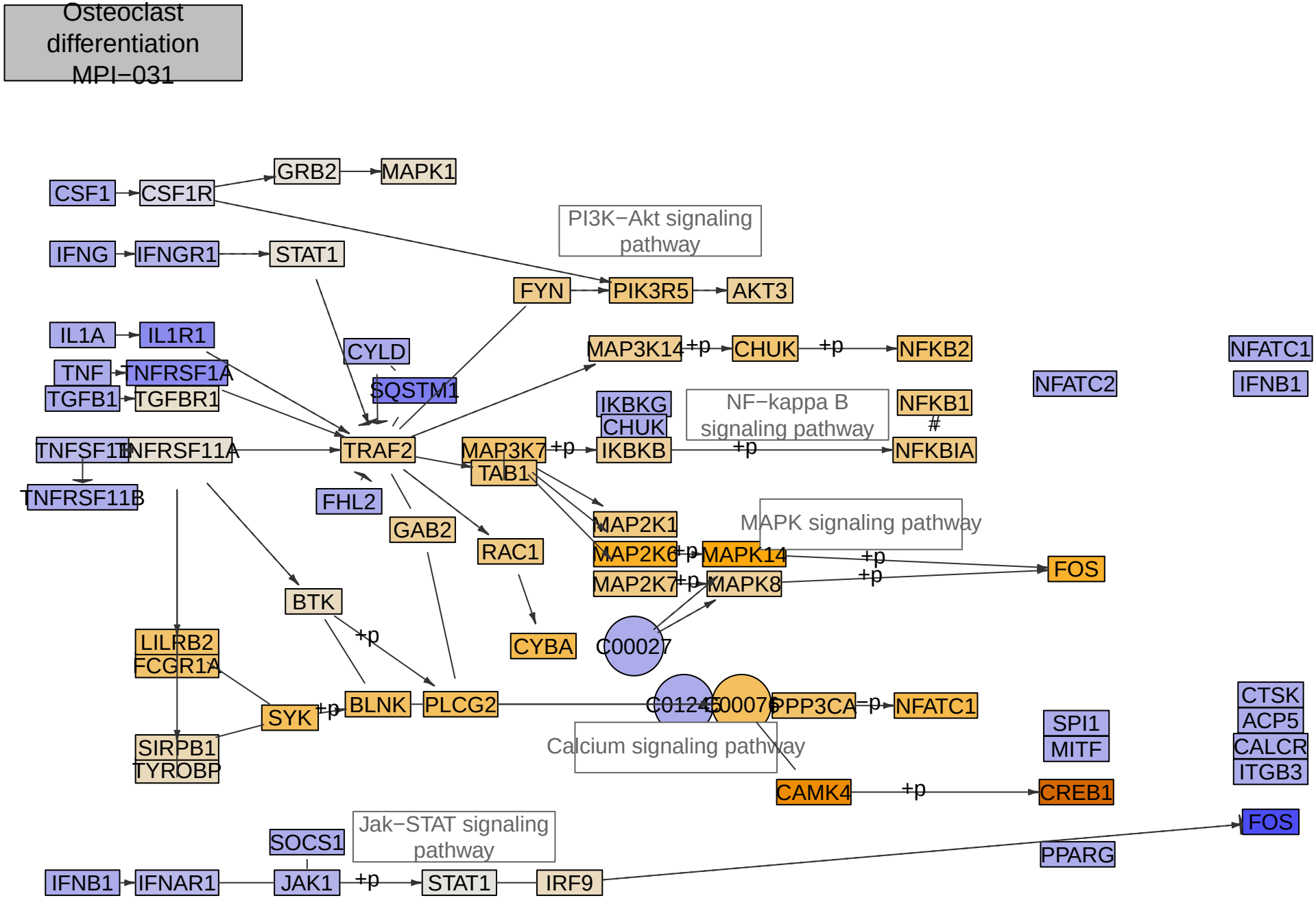
IRF9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CYLD
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CHUK
+p
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SQSTM1
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TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
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MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
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CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
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SIRPB1
TYROBP
Calcium signaling pathway
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MITF
CTSK
ACP5
CALCR
ITGB3
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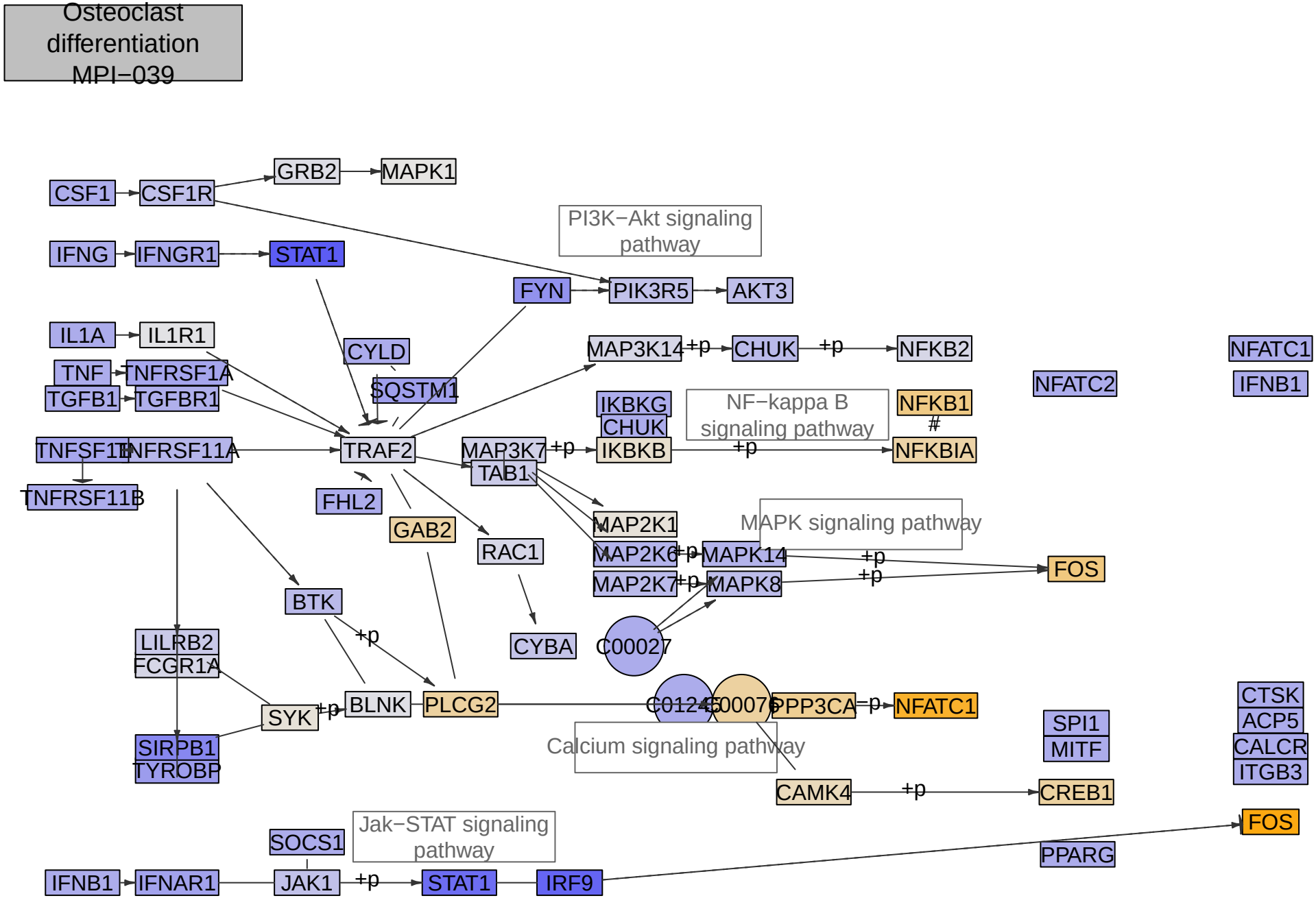
IRF9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NF−kappa B signaling pathway
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+p
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TAB1
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FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
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FCGR1A
+p
CYBA
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BLNK
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ACP5
SPI1
MITF
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TYROBP
Calcium signaling pathway
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ITGB3
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IFNAR1
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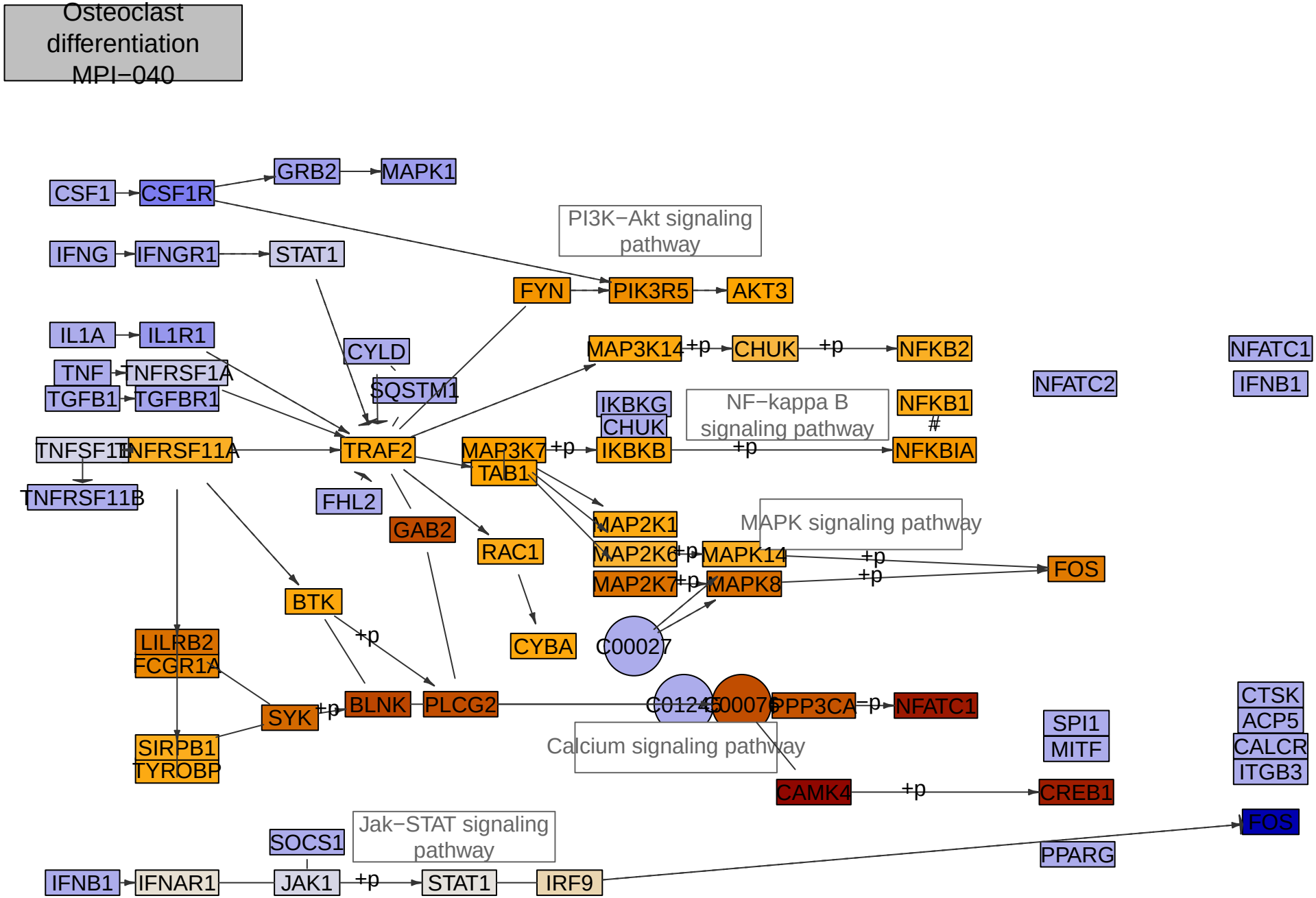
IRF9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TGFBR1
IKBKG
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NF−kappa B signaling pathway
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IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
MAP2K1
MAPK signaling pathway
GAB2
RAC1
MAP2K6
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MAPK14
+p
FOS
MAP2K7
+p
MAPK8
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BTK
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FCGR1A
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CYBA
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SPI1
MITF
CTSK
ACP5
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ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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Jak−STAT signaling pathway
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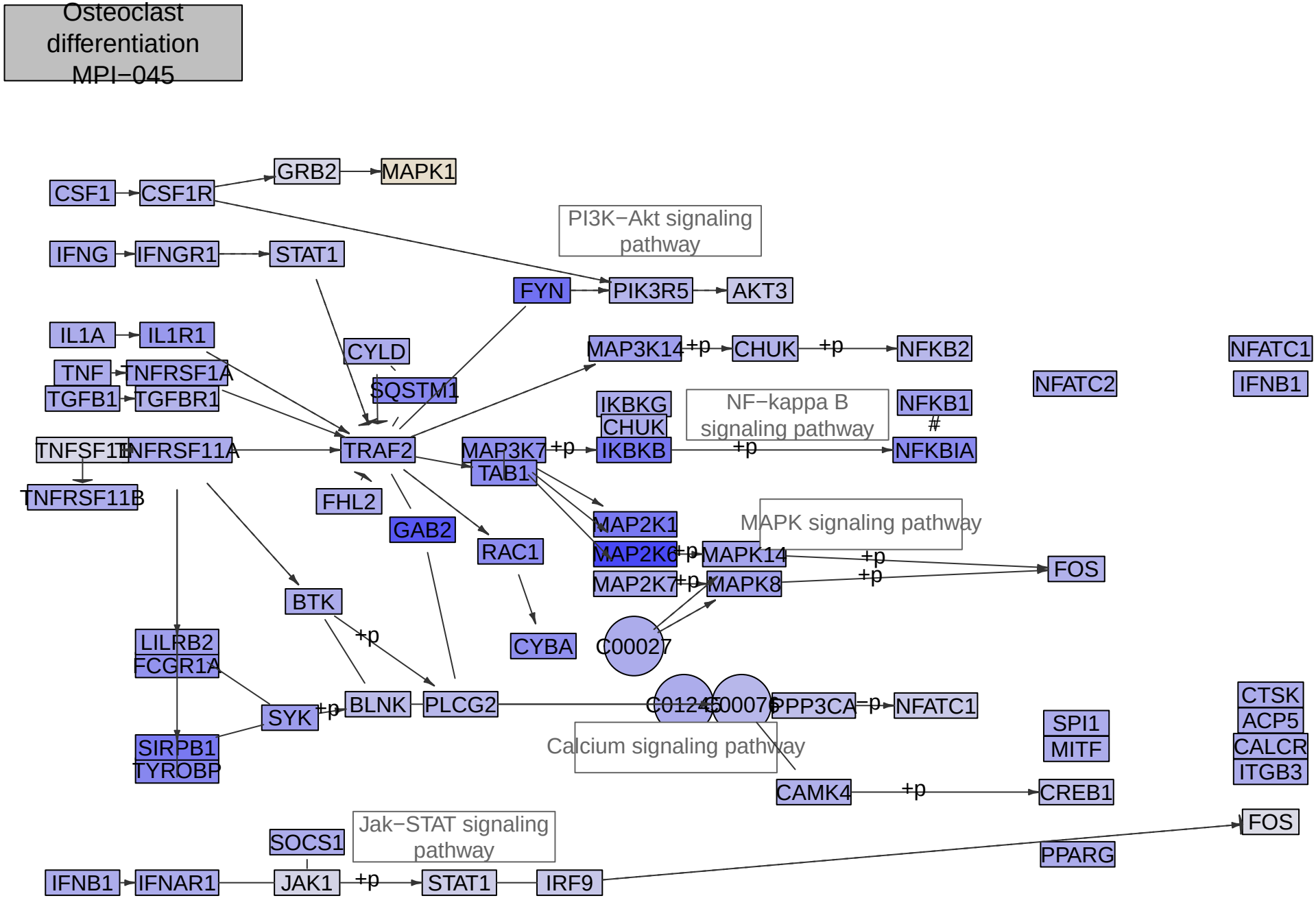
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CYLD
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+p
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NFKBIA
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TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
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MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
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SPI1
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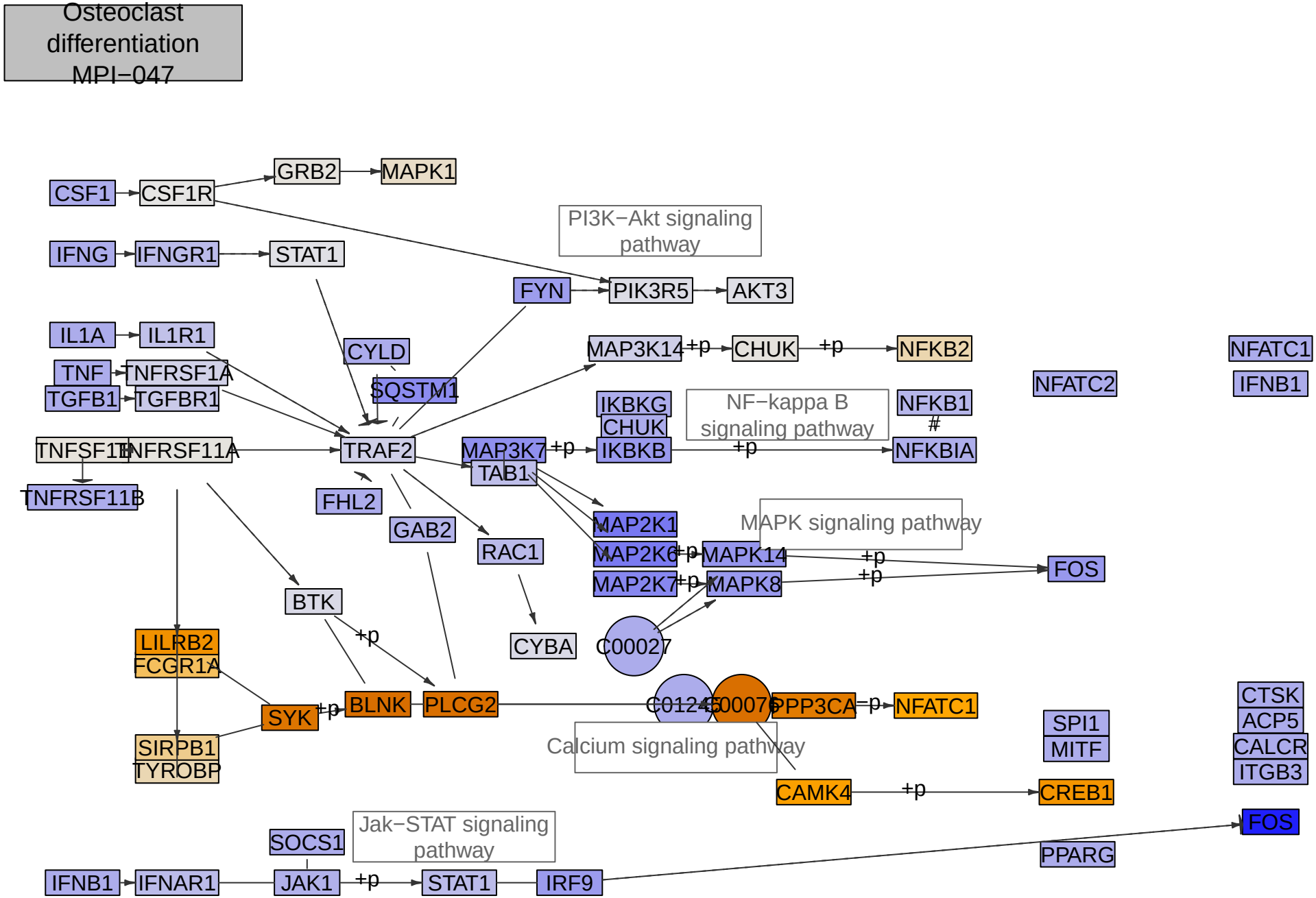
IRF9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TGFBR1
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CHUK
NF−kappa B signaling pathway
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IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
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MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
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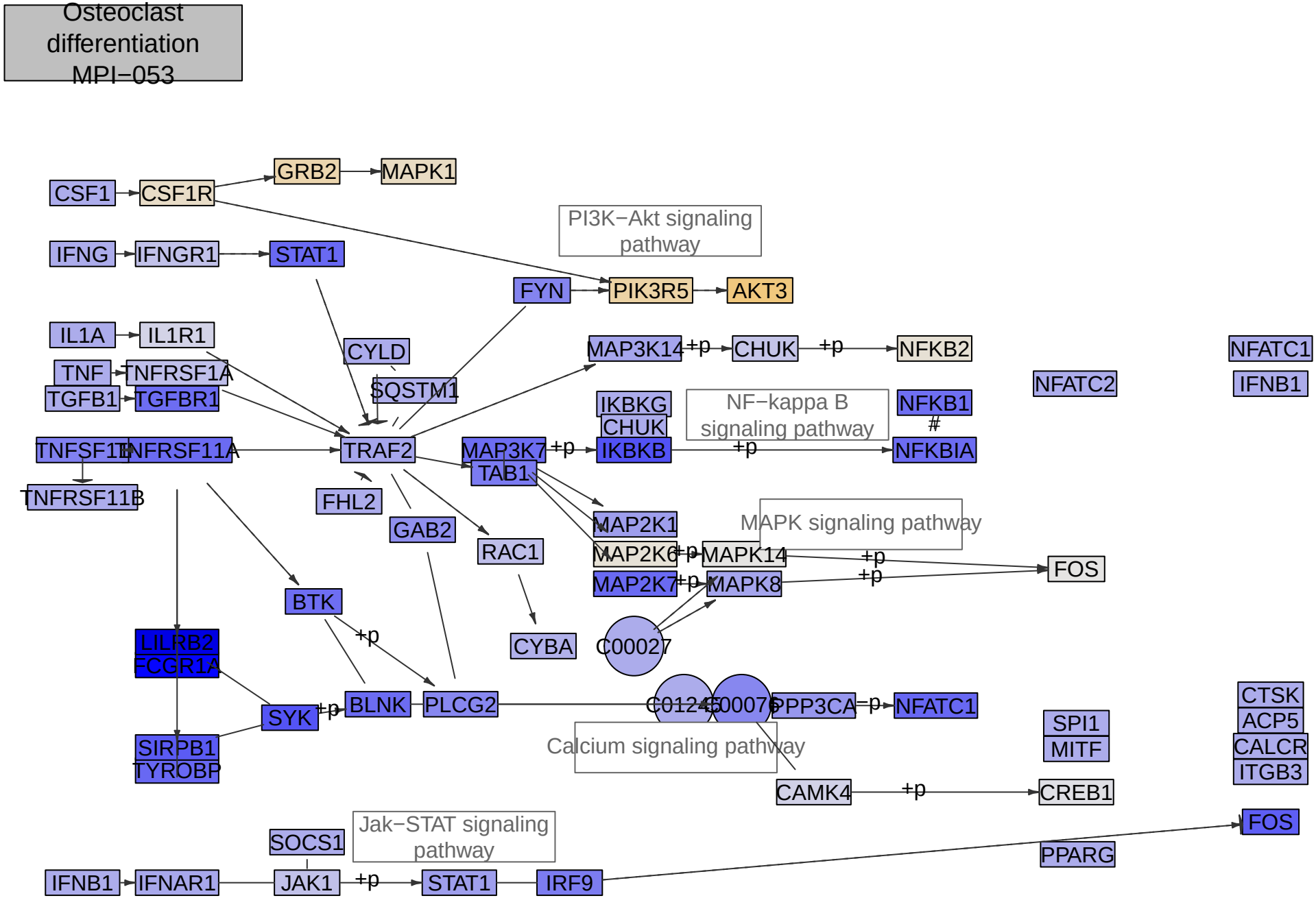
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CYLD
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+p
CHUK
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NF−kappa B signaling pathway
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GAB2
RAC1
MAP2K1
MAPK signaling pathway
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MAPK14
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FOS
MAP2K7
+p
MAPK8
+p
BTK
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TYROBP
Calcium signaling pathway
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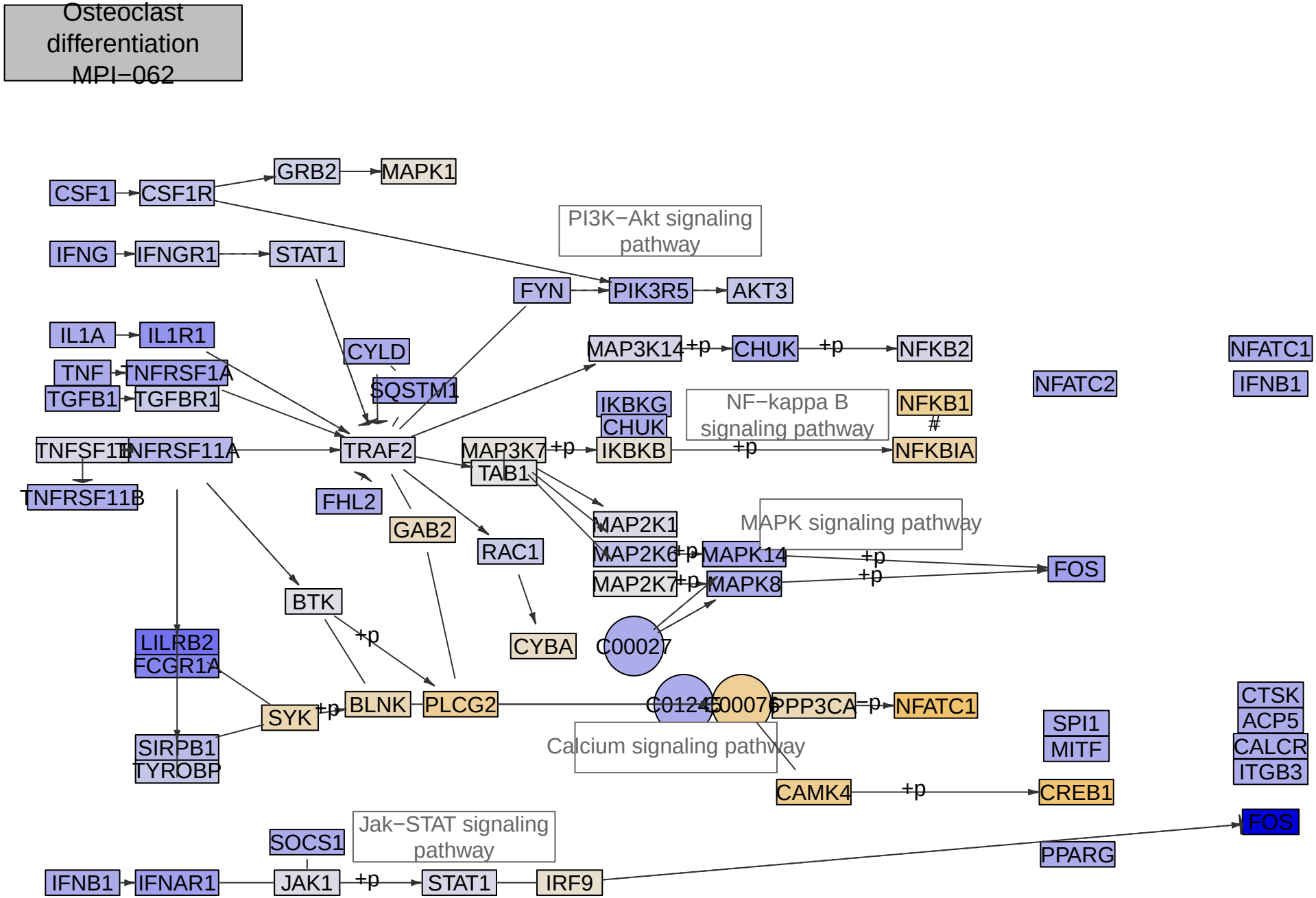
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+p
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TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TRAF2
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IKBKB
+p
NFKBIA
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FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
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+p
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MAP2K7
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MAPK8
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BTK
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Calcium signaling pathway
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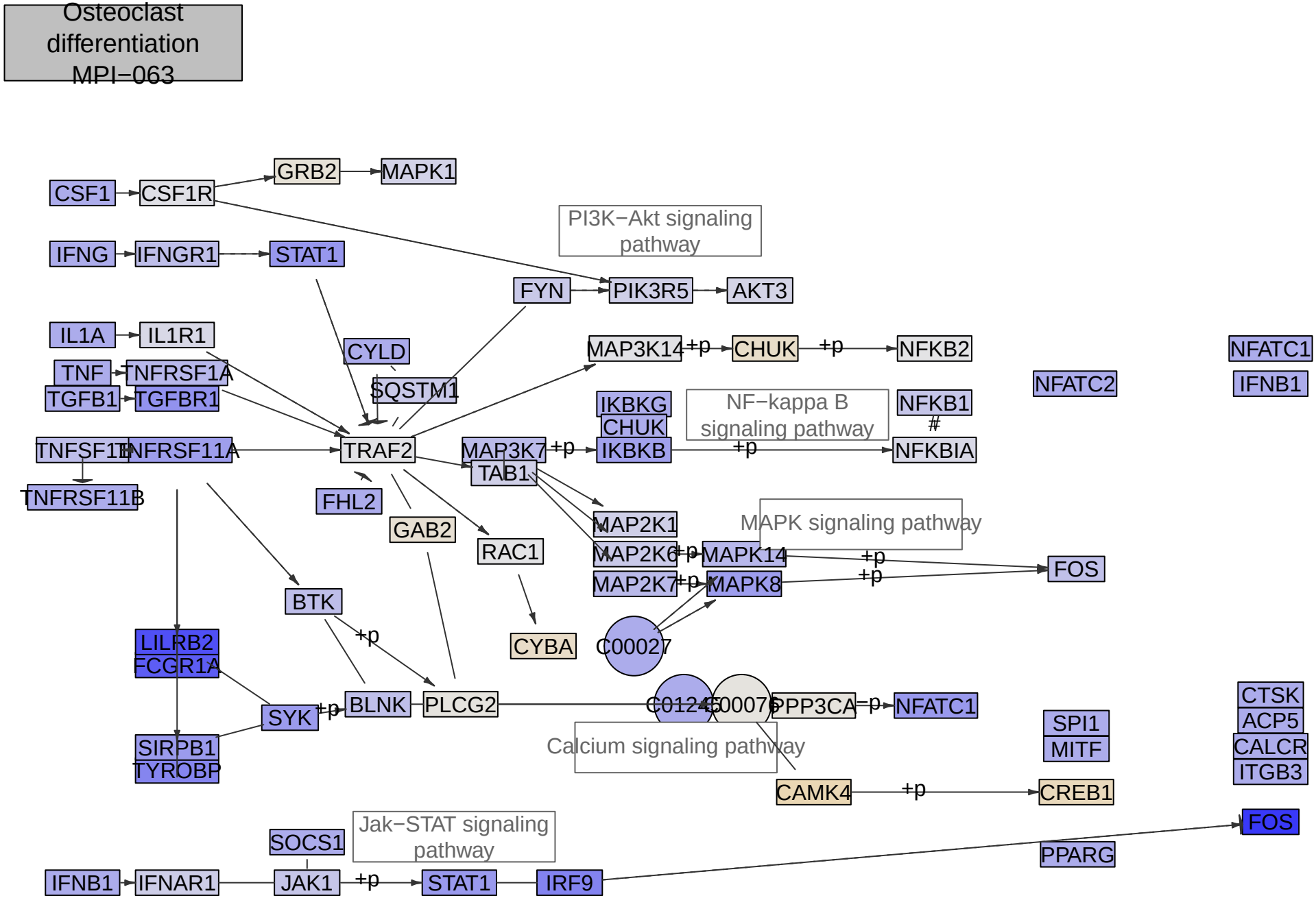
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CYLD
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TNFRSF1A
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TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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GAB2
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MAP2K1
MAPK signaling pathway
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FOS
MAP2K7
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MAPK8
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BTK
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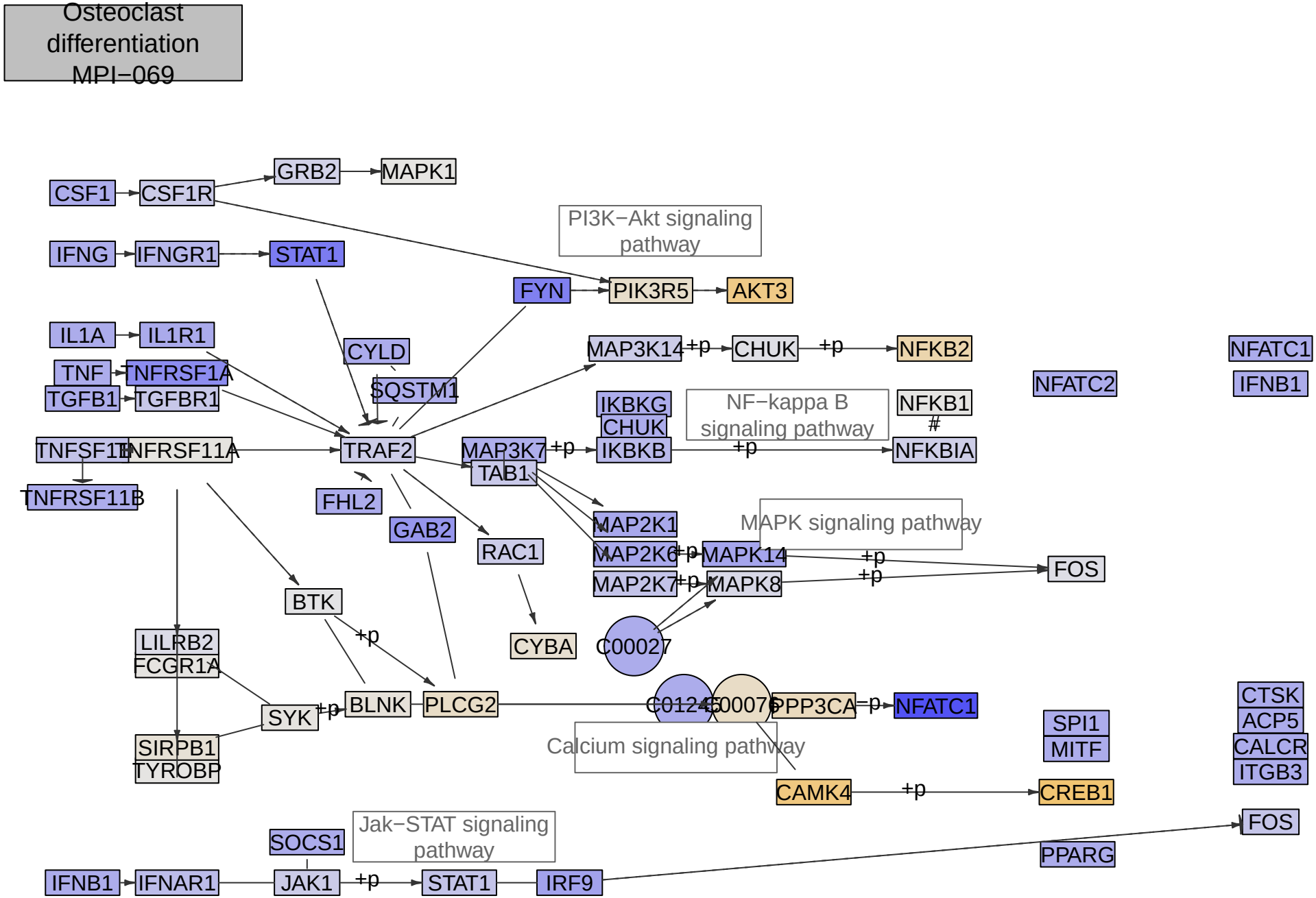
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NF−kappa B signaling pathway
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FHL2
GAB2
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MAPK signaling pathway
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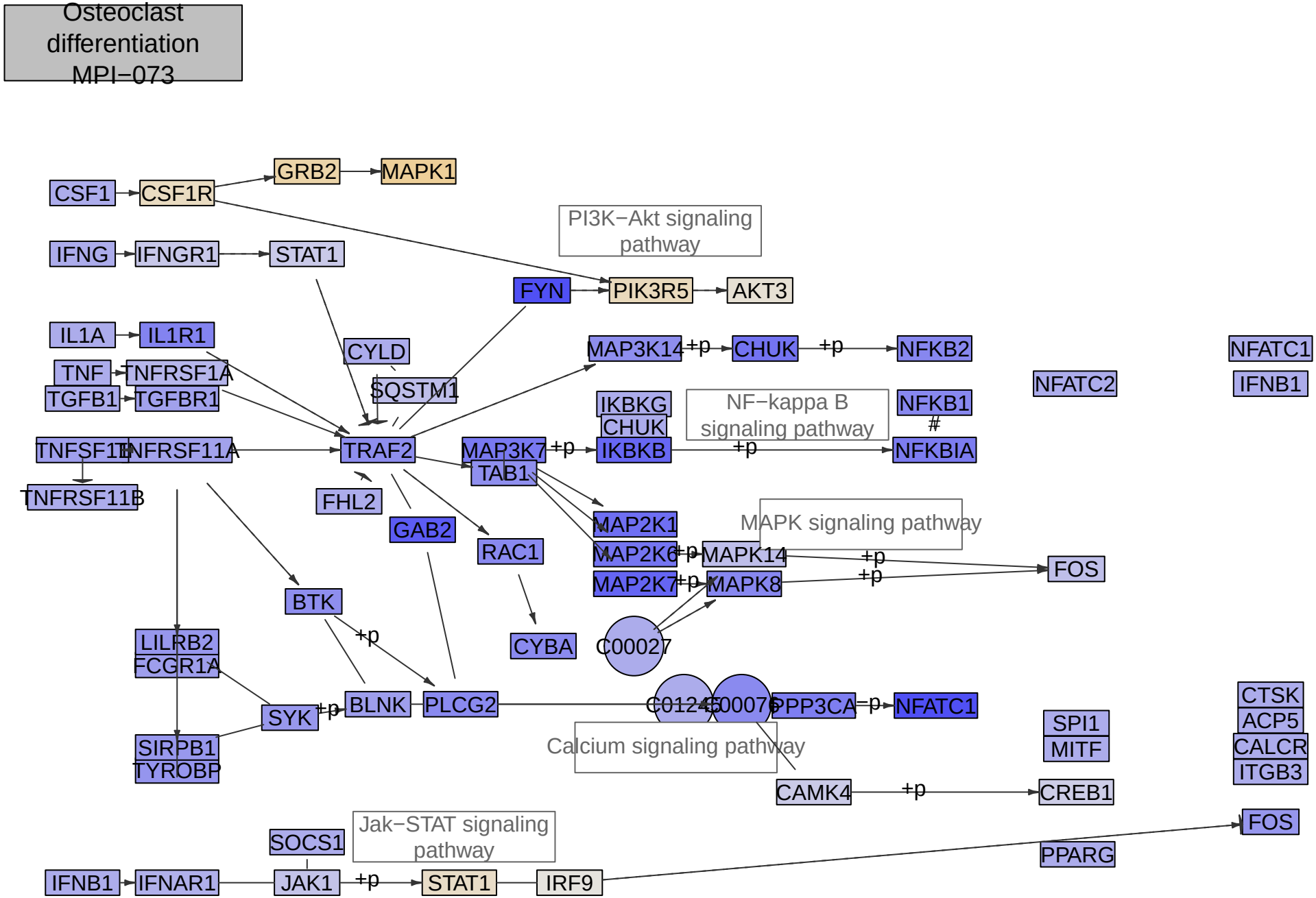
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IFNB1
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TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
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IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
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GAB2
MAP2K1
MAPK signaling pathway
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MAP2K7
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MAPK8
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Calcium signaling pathway
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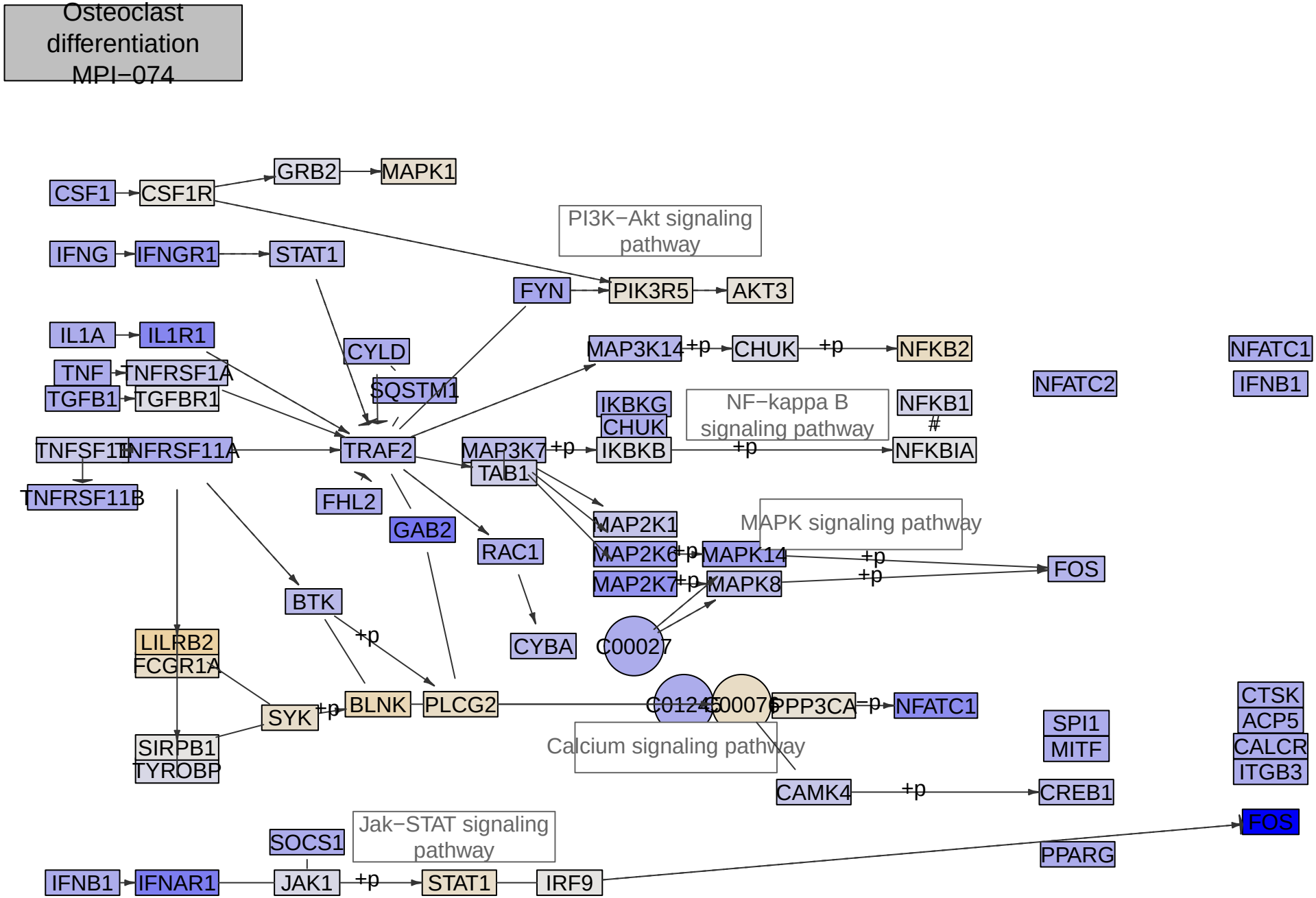
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CHUK
NF−kappa B signaling pathway
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TAB1
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FHL2
GAB2
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MAPK signaling pathway
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Jak−STAT signaling pathway
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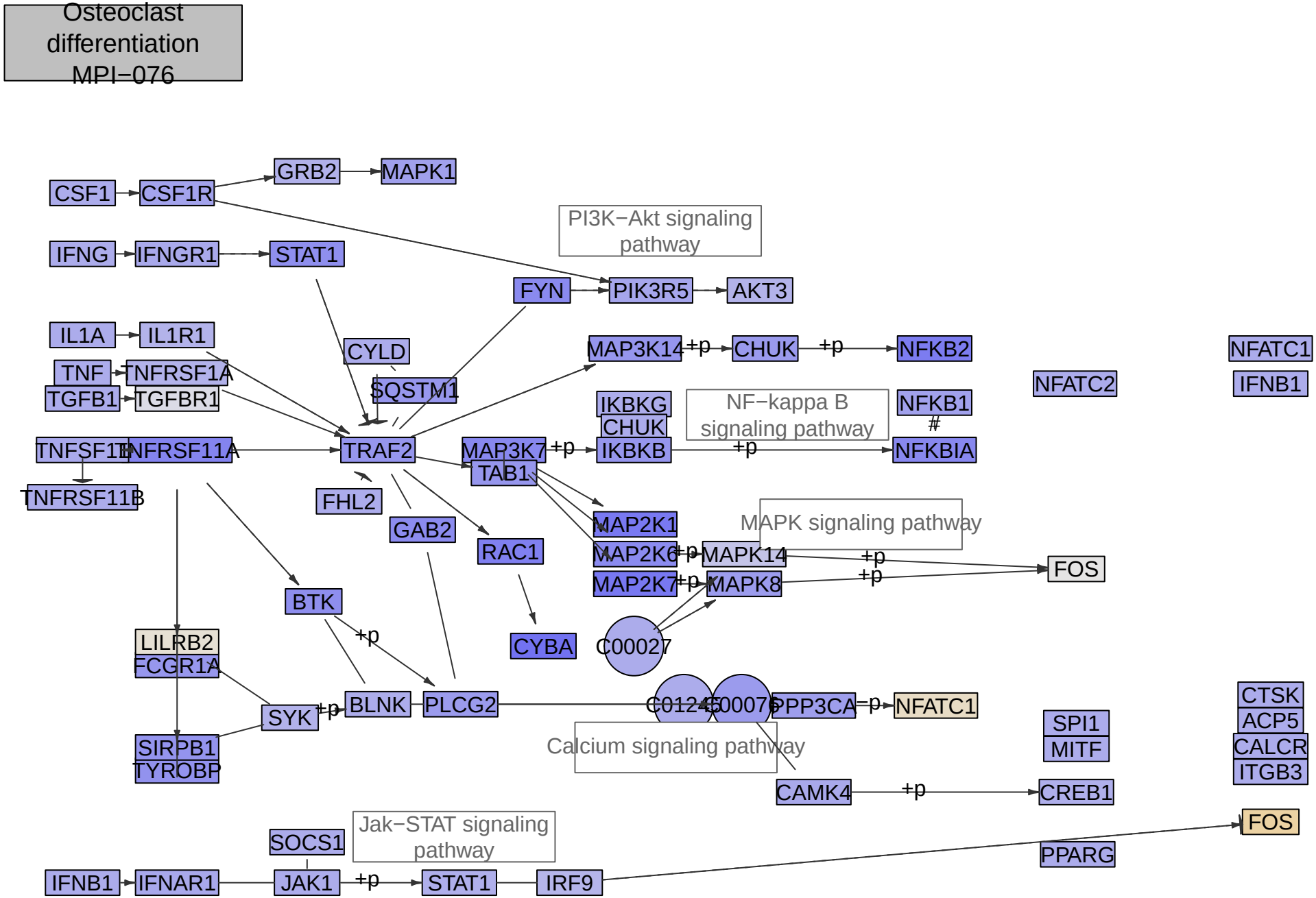
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+p
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TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
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+p
MAPK14
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FOS
MAP2K7
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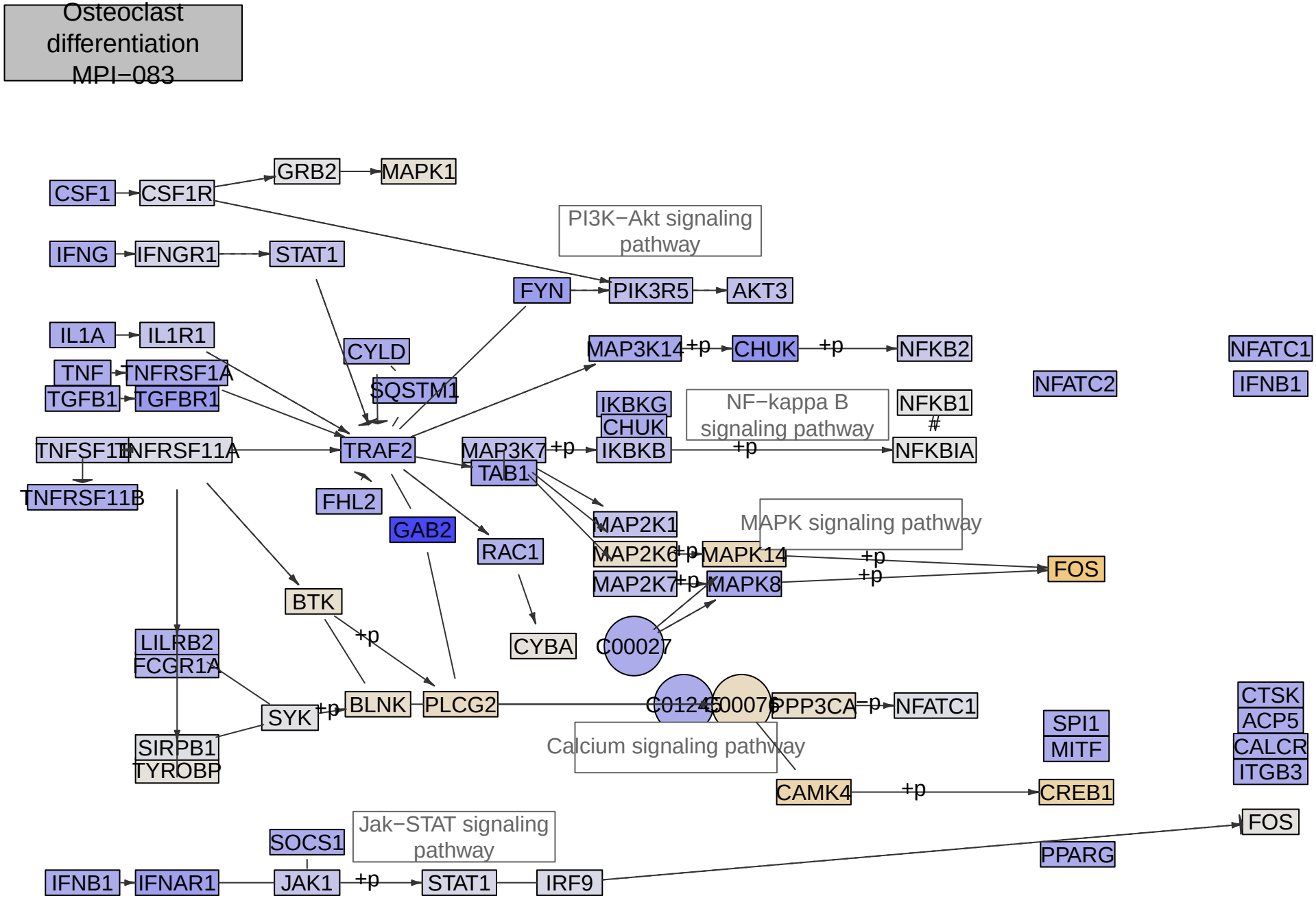
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TNF
TNFRSF1A
SQSTM1
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IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TRAF2
MAP3K7
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IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
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MAPK14
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FOS
MAP2K7
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MAPK8
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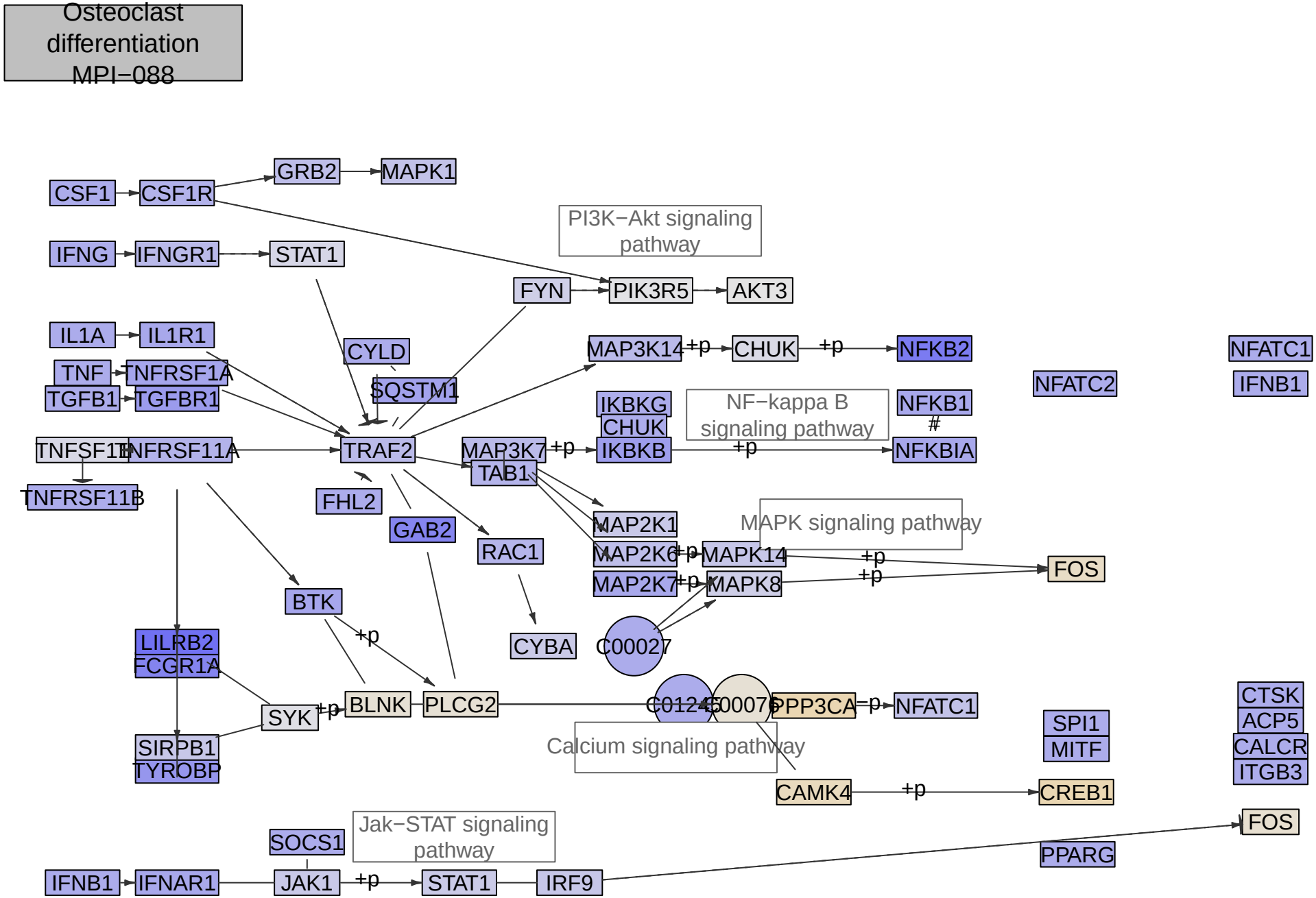
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TNF
TNFRSF1A
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TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
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MAPK14
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MAP2K7
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MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
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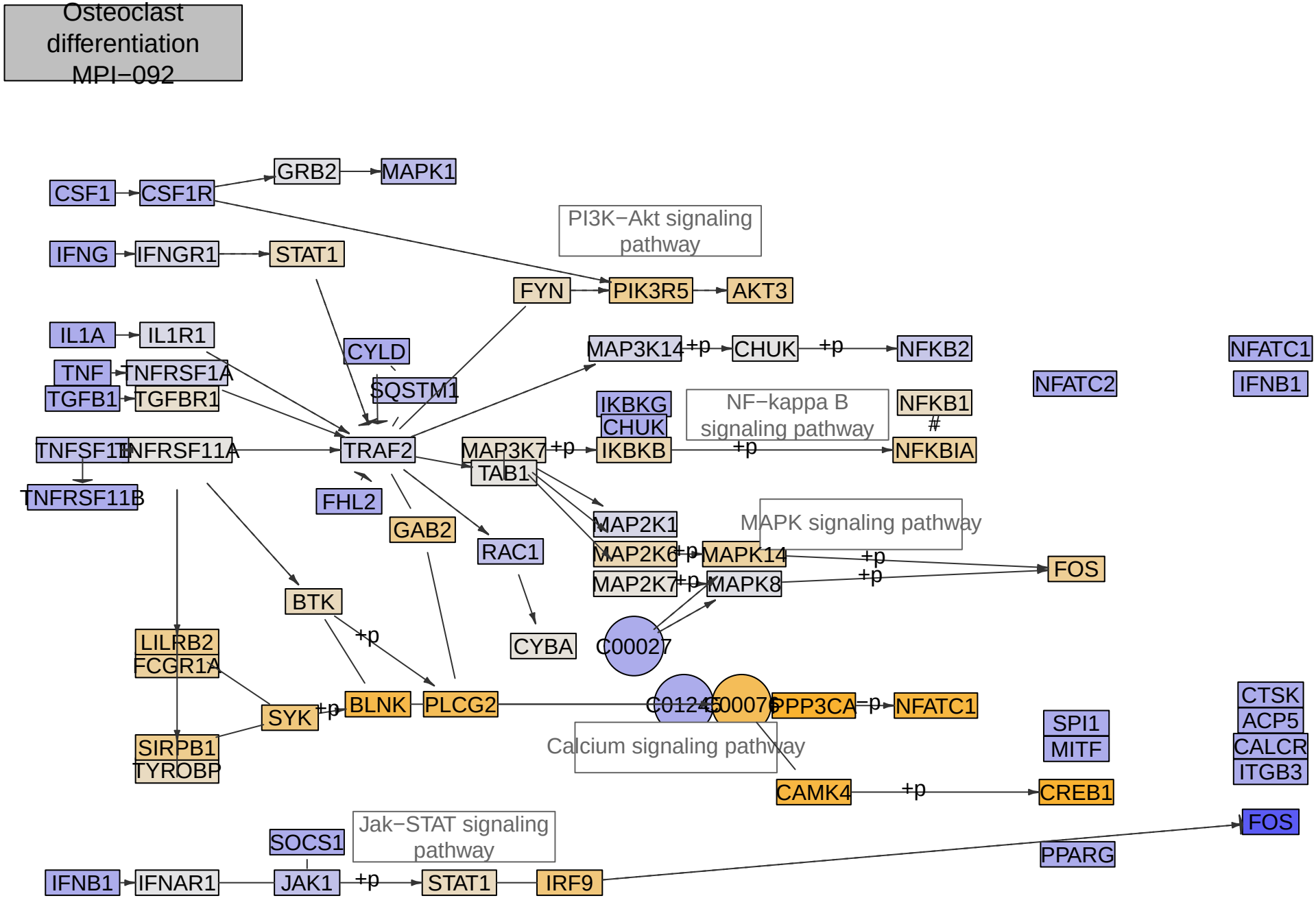
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9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AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
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FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
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CREB1
FOS
SOCS1
Jak−STAT signaling pathway
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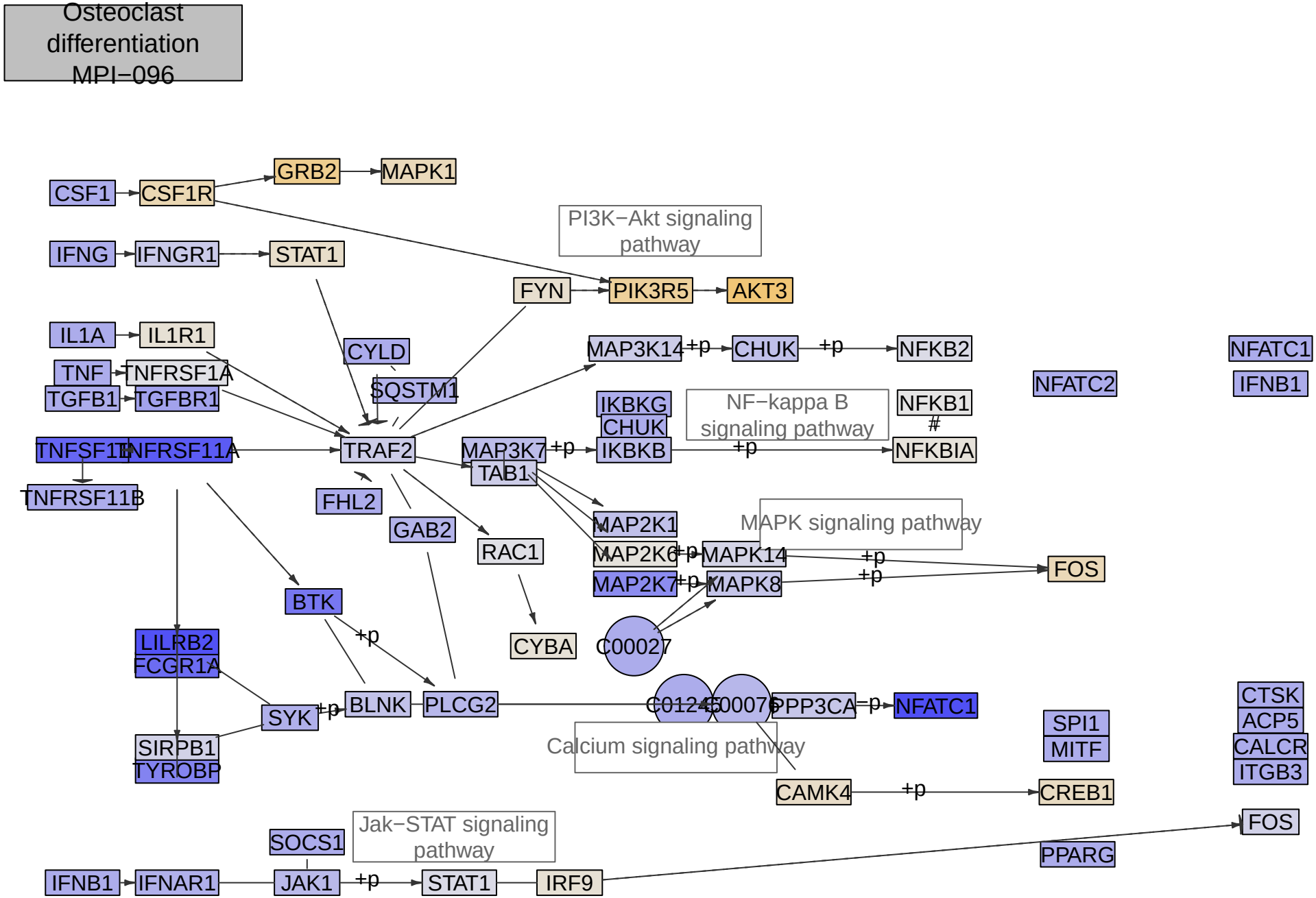
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−096
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CSF1R
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STAT1
FYN
PIK3R5
AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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TNFRSF11A
TRAF2
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IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
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CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
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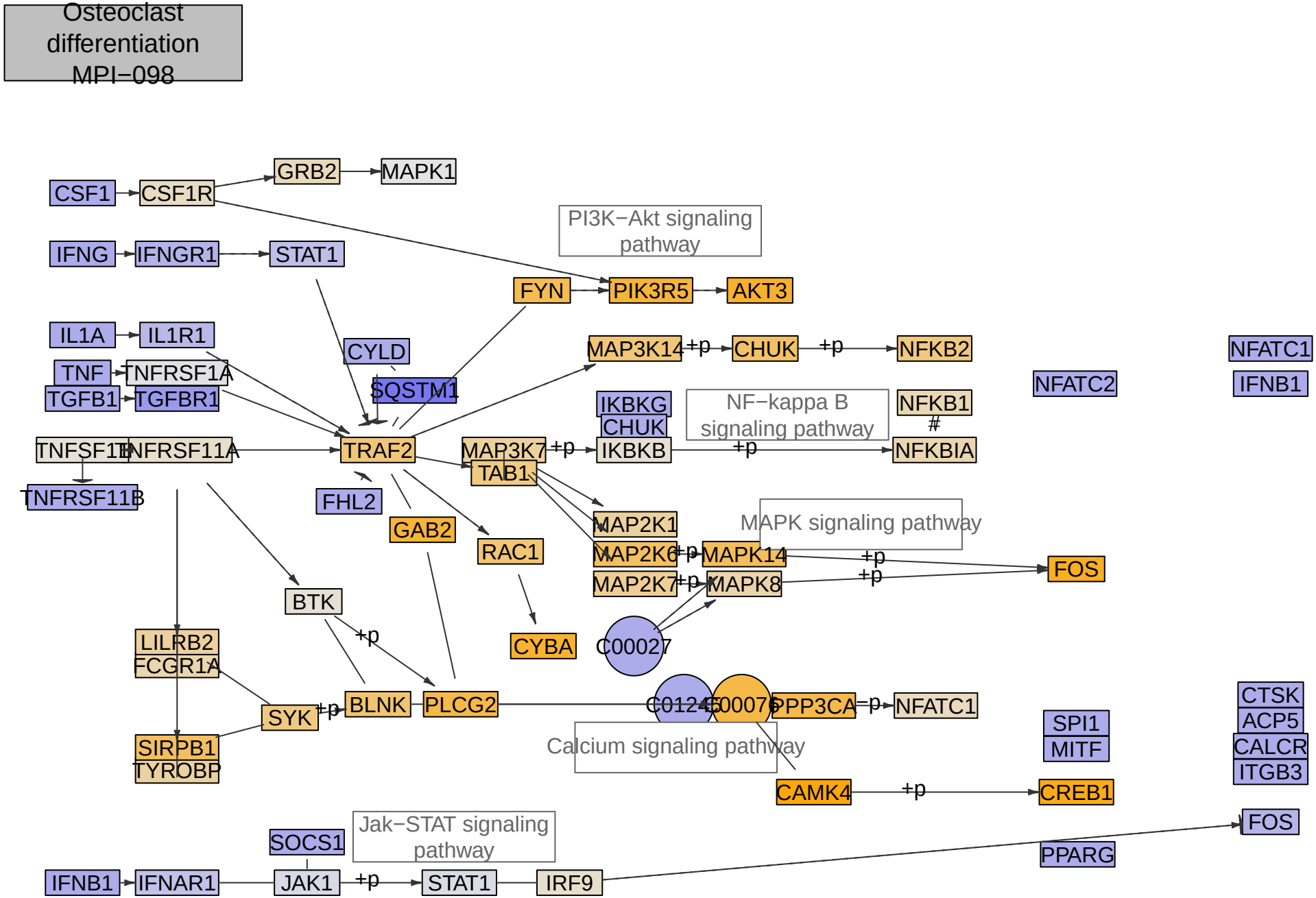
IRF9


Osteoclast differentiation MPI−098
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CSF1R
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STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
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IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
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+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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CREB1
SOCS1
Jak−STAT signaling pathway
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IFNAR1
JAK1
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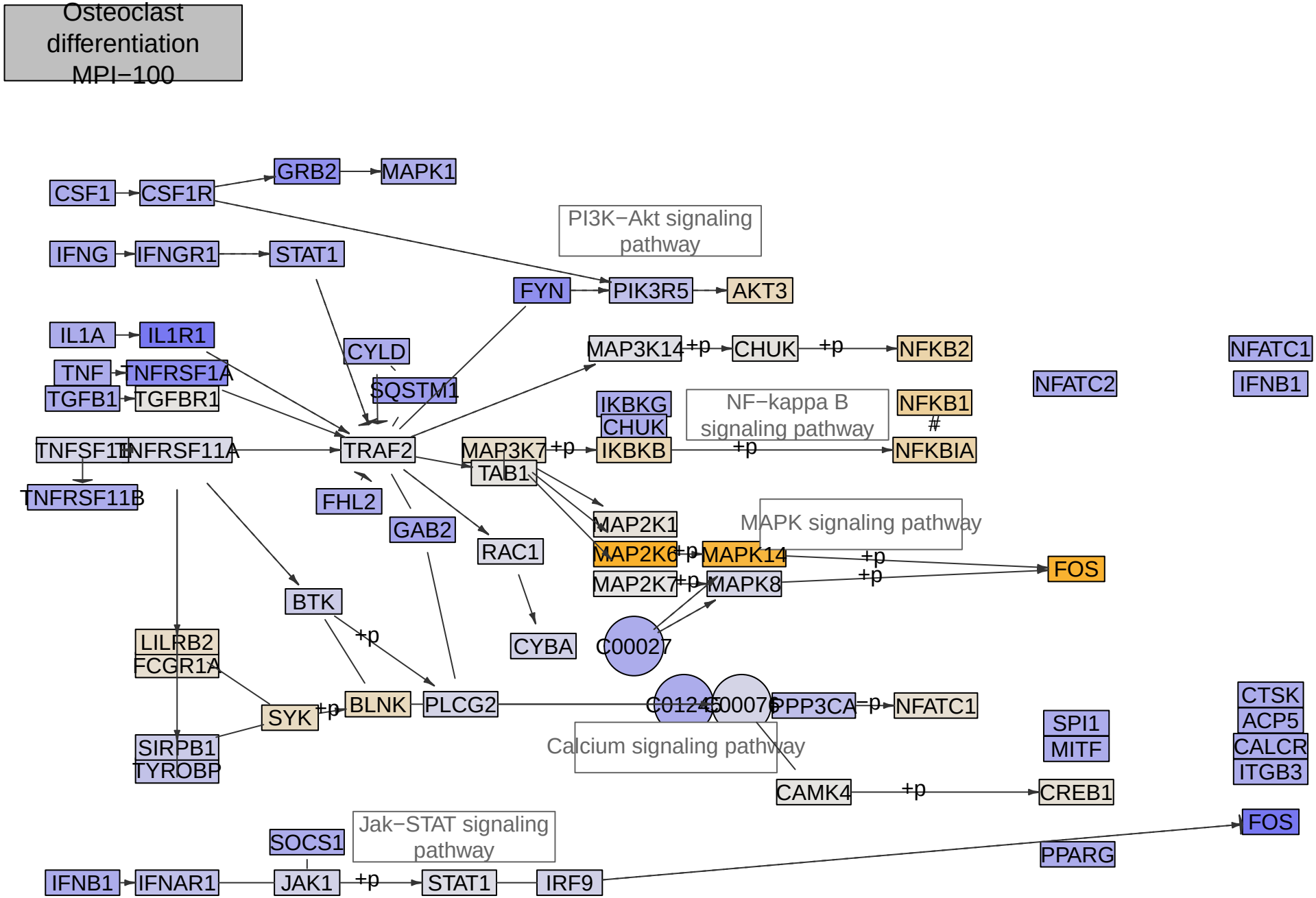
STAT1
IRF9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CSF1R
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STAT1
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AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
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SOCS1
Jak−STAT signaling pathway
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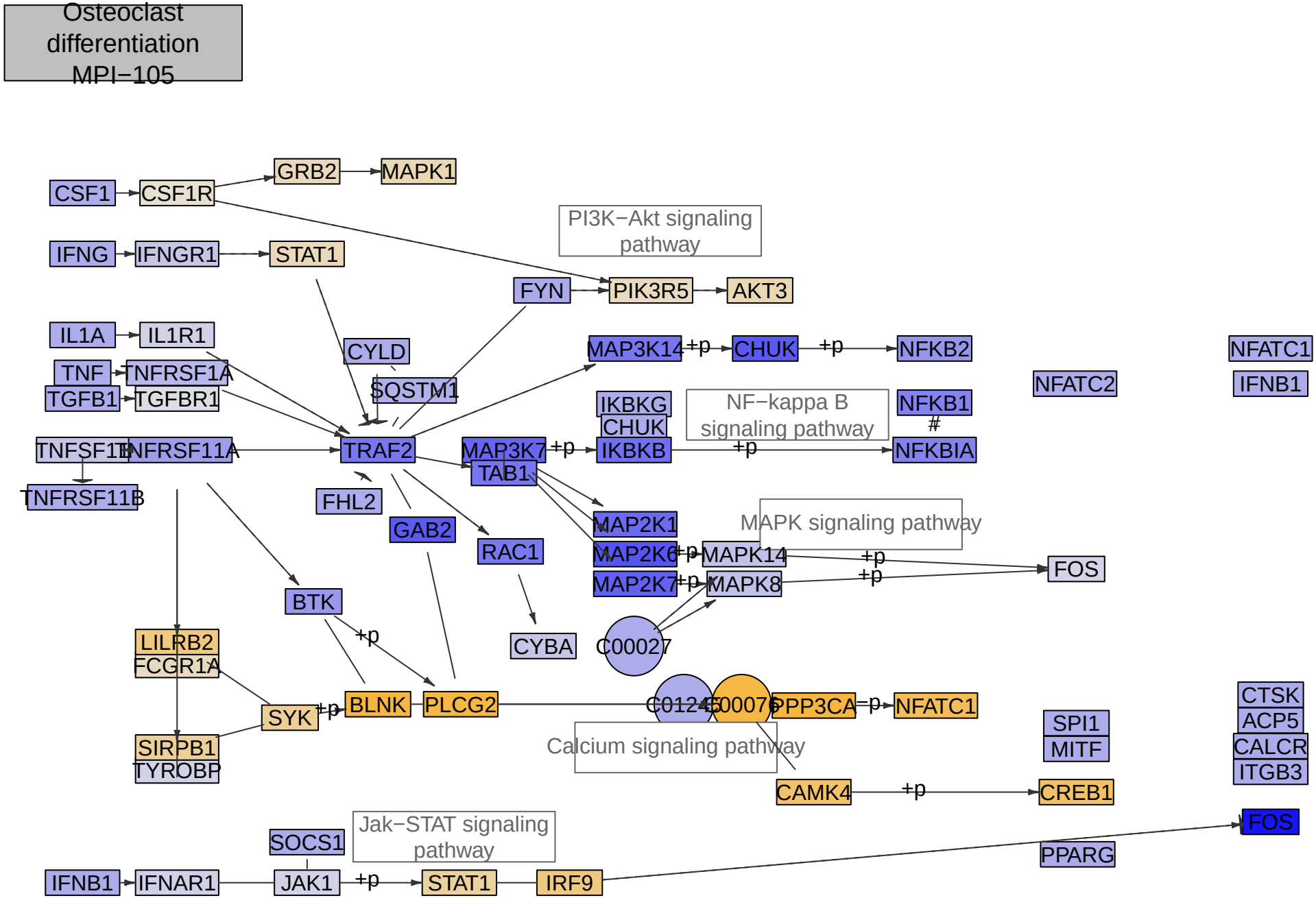
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AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
MAP2K1
MAPK signaling pathway
GAB2
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
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+p
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CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
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SOCS1
Jak−STAT signaling pathway
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IFNAR1
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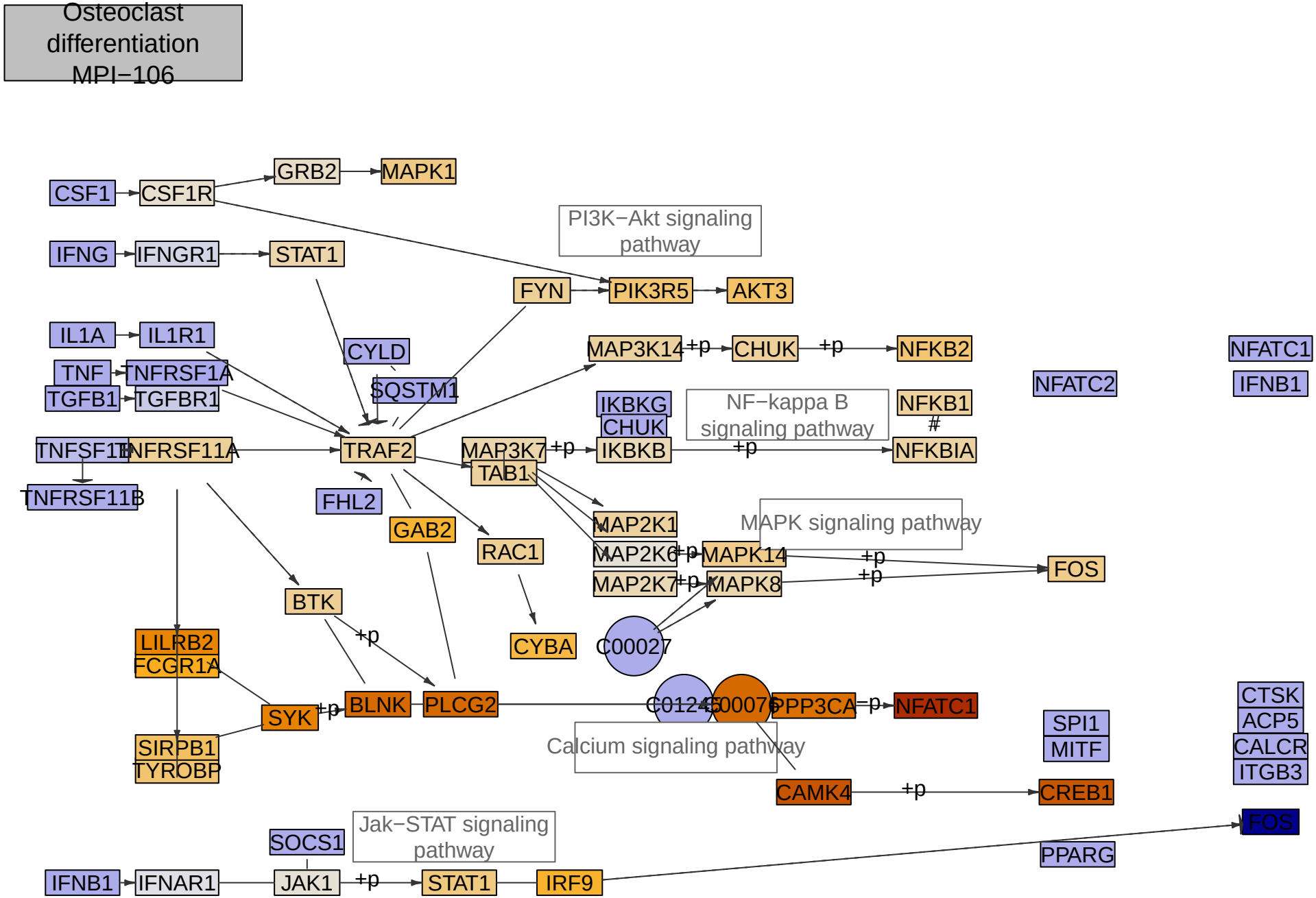
IRF9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AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
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BLNK
PLCG2
C01245
C00076
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SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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Jak−STAT signaling pathway
FOS
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IFNAR1
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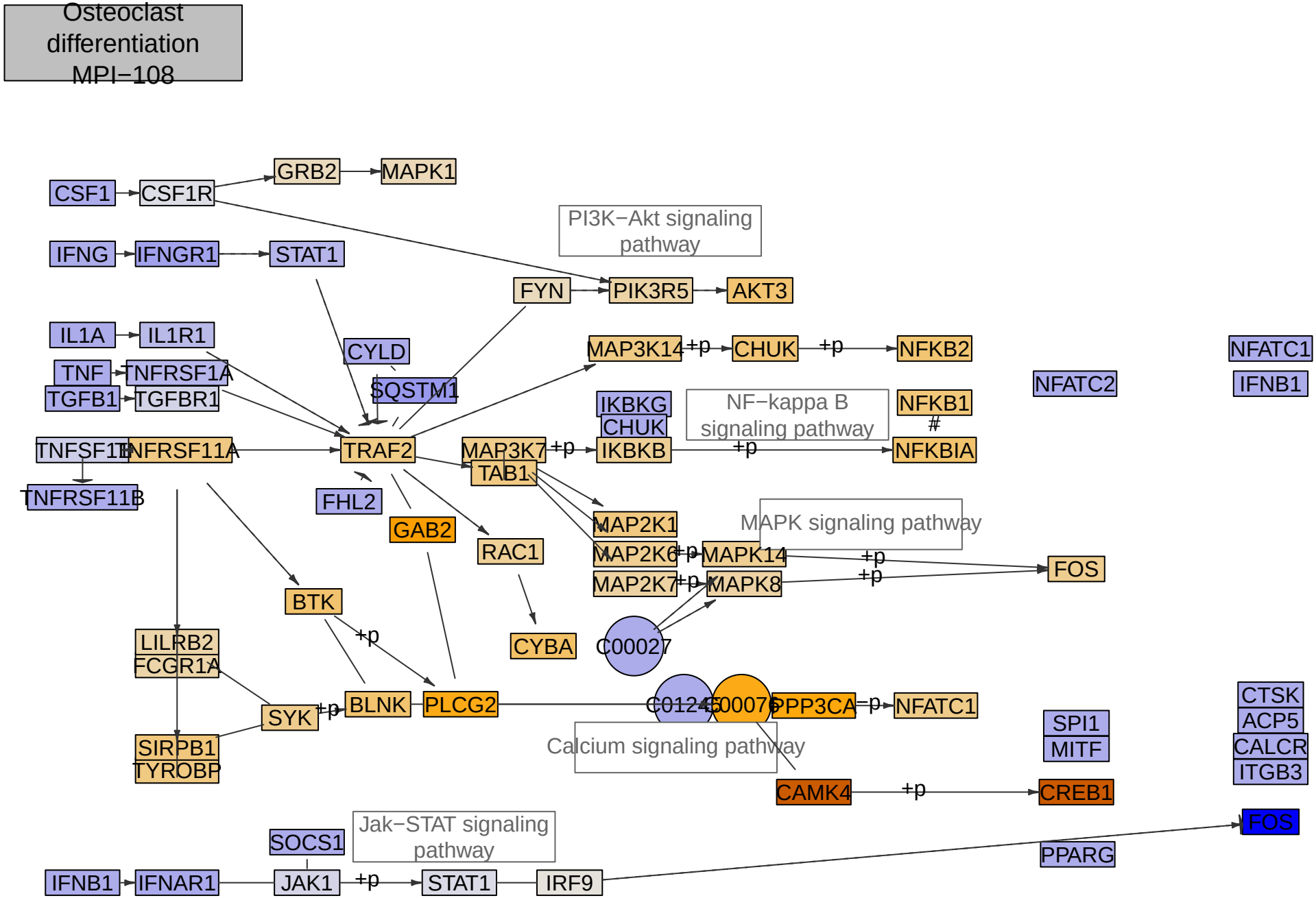
IRF9
PPARG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AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
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BLNK
PLCG2
C01245
C00076
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+p
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SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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CREB1
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SOCS1
Jak−STAT signaling pathway
PPARG
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IFNAR1
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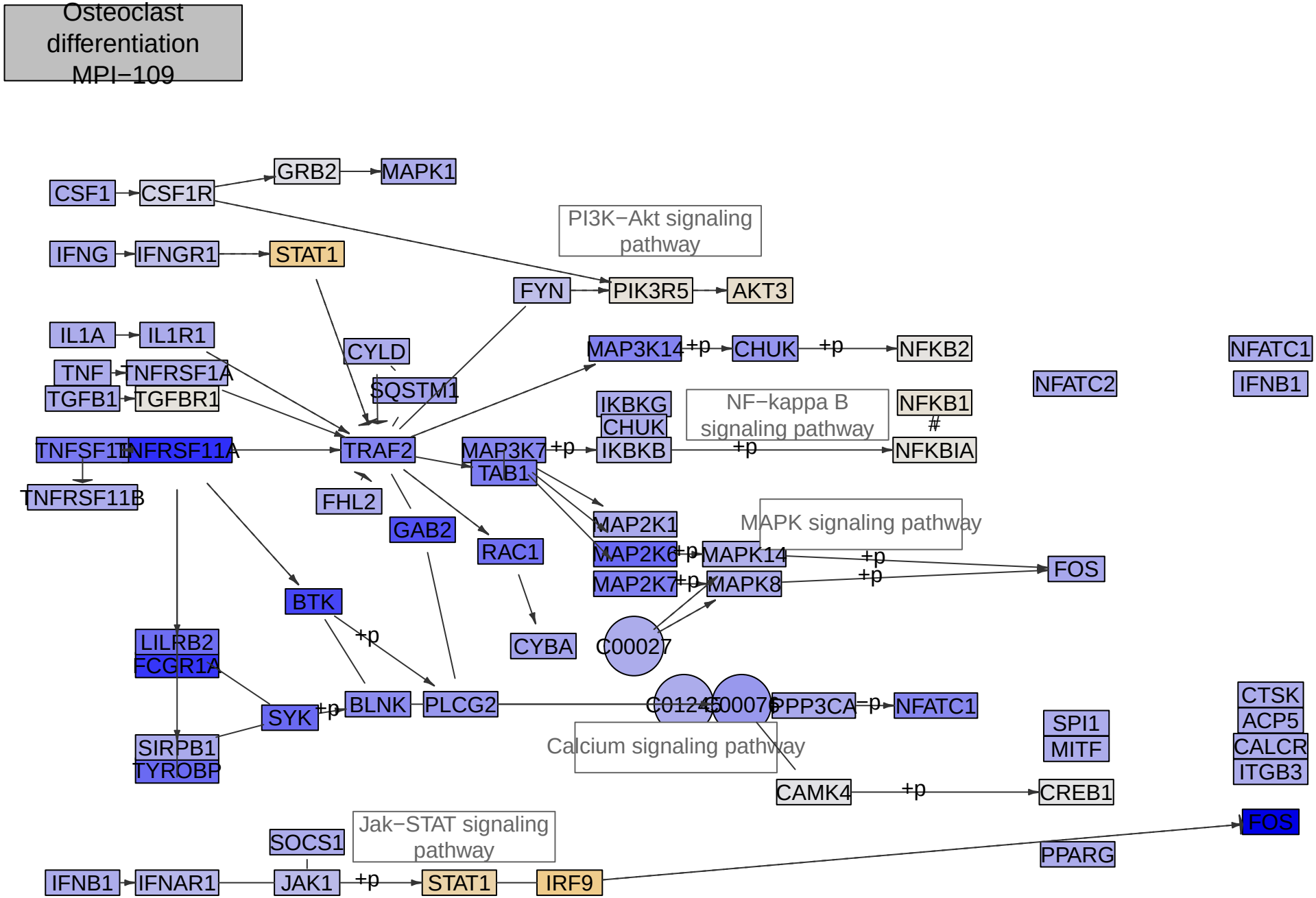
+p
STAT1
IRF9


Osteoclast differentiation MPI−109
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
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TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
MAP2K1
MAPK signaling pathway
GAB2
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
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SPI1
MITF
CTSK
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ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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IRF9
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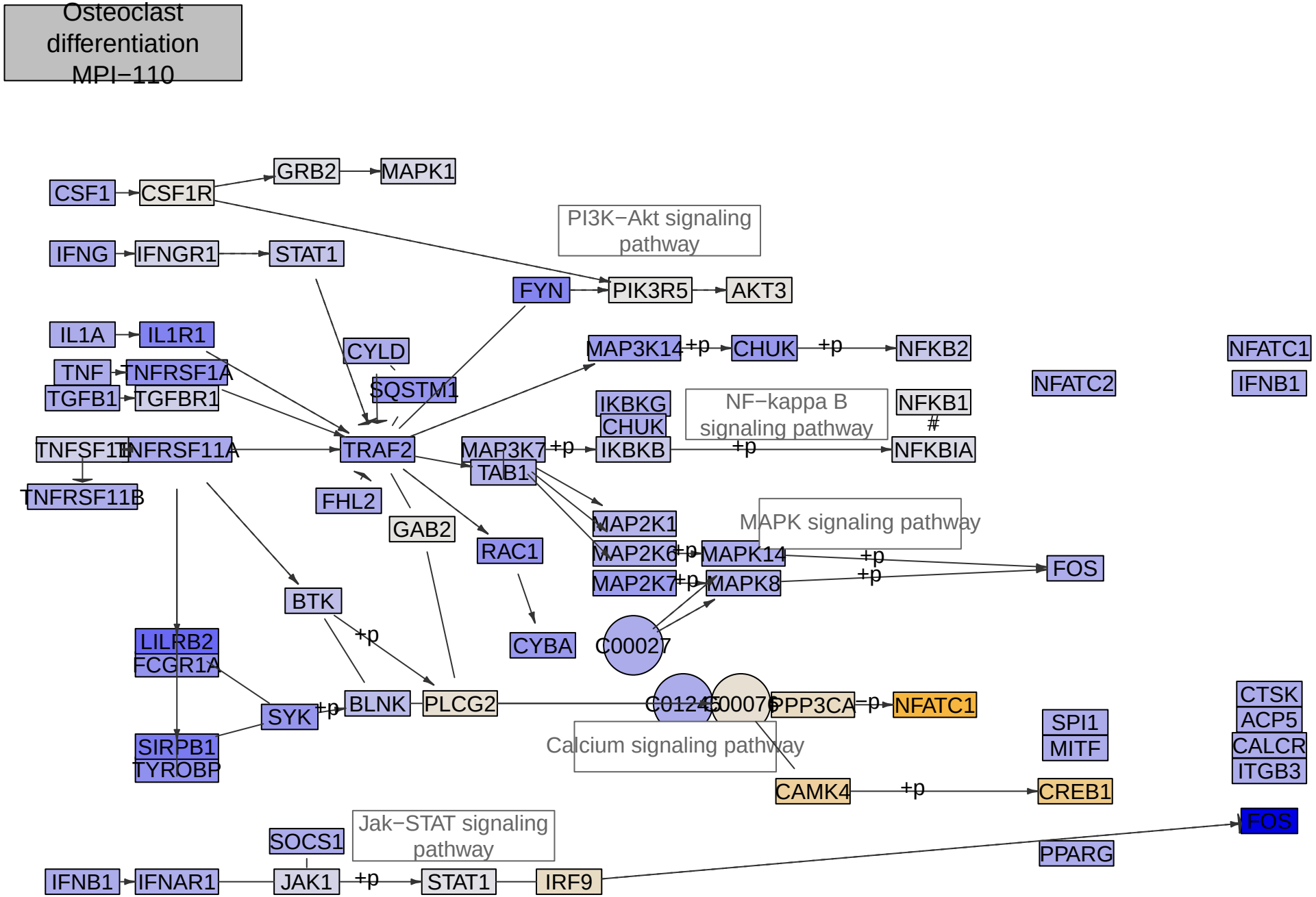
Osteoclast differentiation MPI−110
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TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TRAF2
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+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
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Calcium signaling pathway
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Jak−STAT signaling pathway
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IFNAR1
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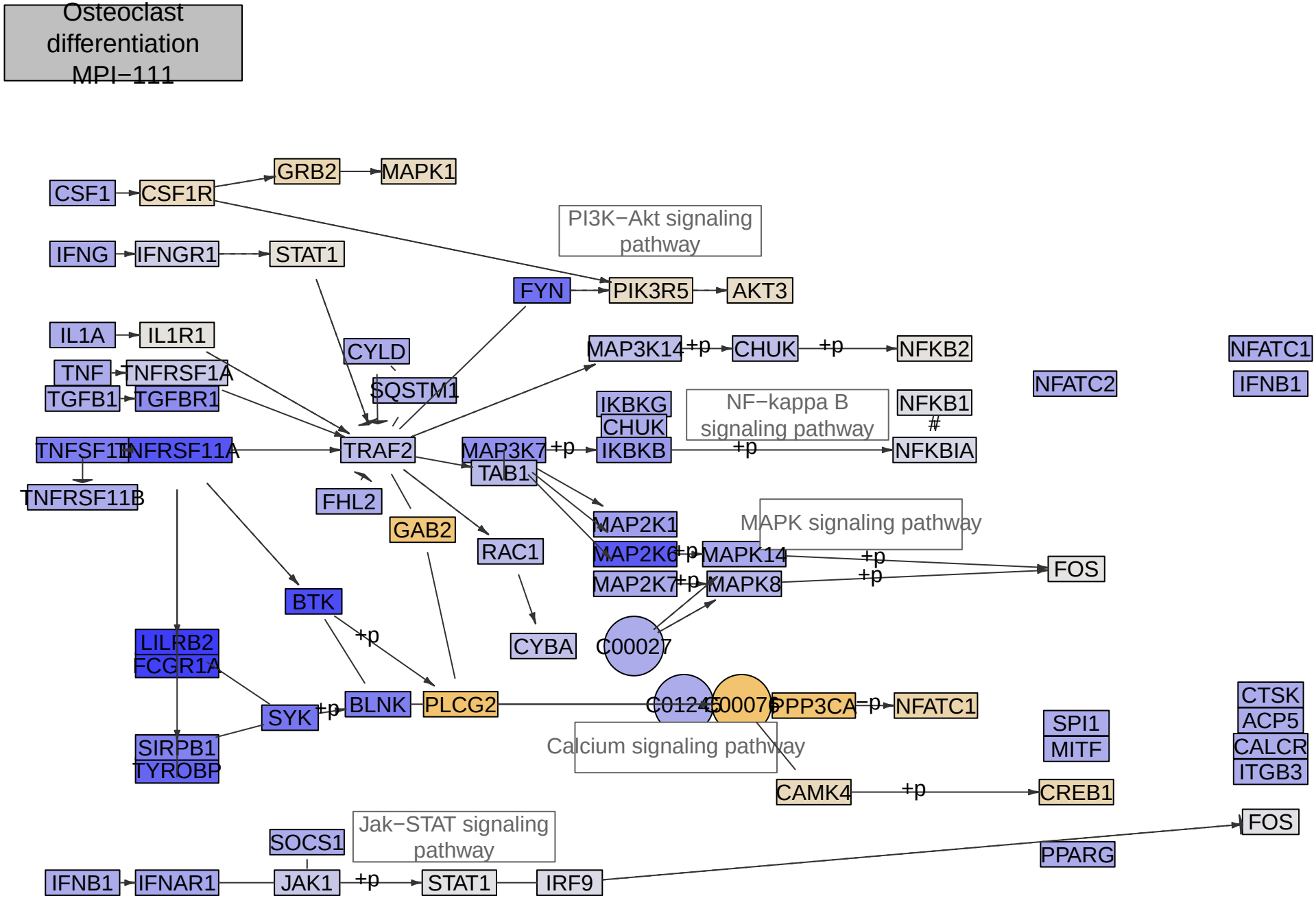
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NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
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BTK
+p
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PLCG2
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TYROBP
Calcium signaling pathway
CALCR
ITGB3
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Jak−STAT signaling pathway
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IFNB1
IFNAR1
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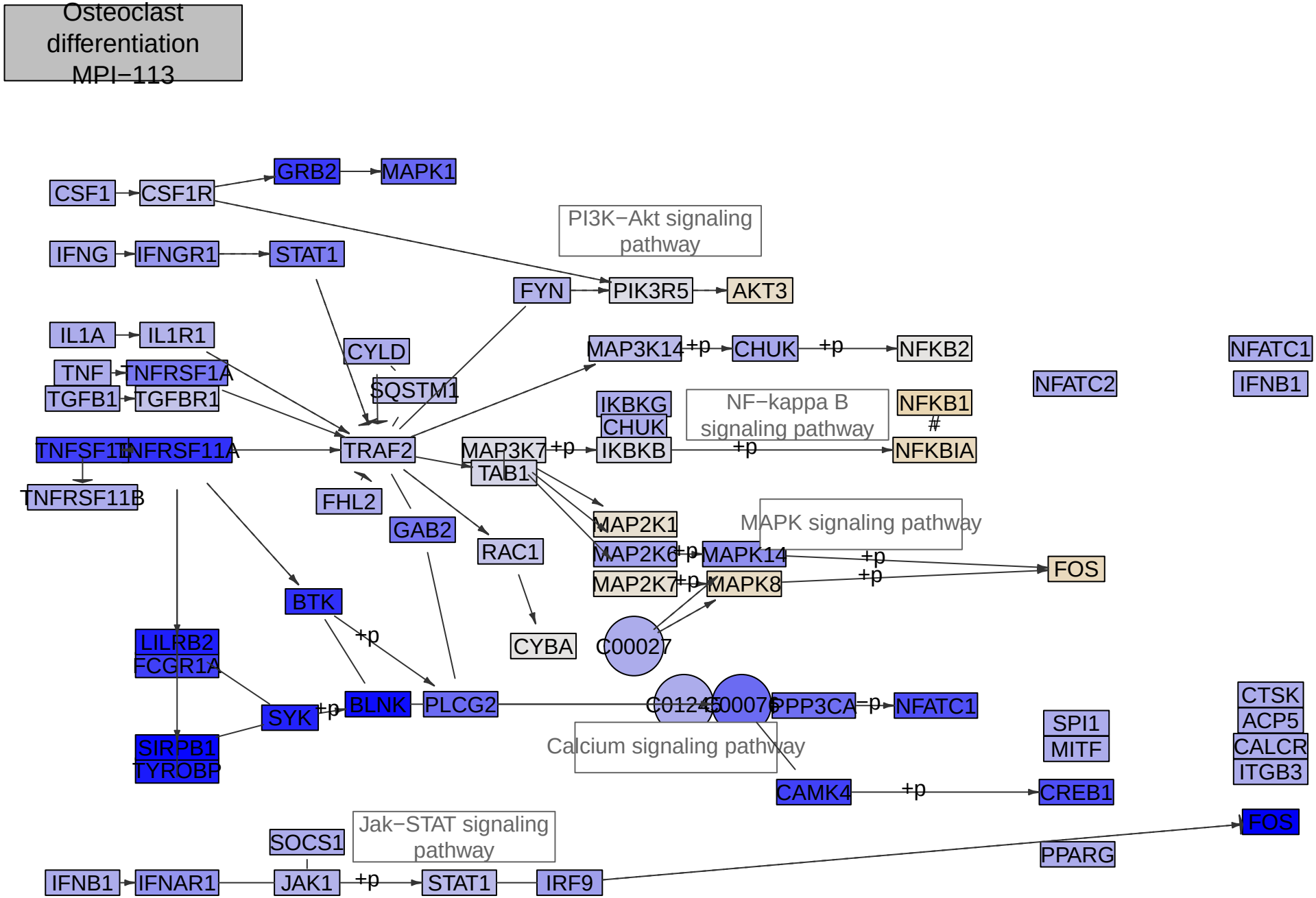
STAT1
IRF9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TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TRAF2
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IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
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TYROBP
Calcium signaling pathway
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Jak−STAT signaling pathway
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IFNAR1
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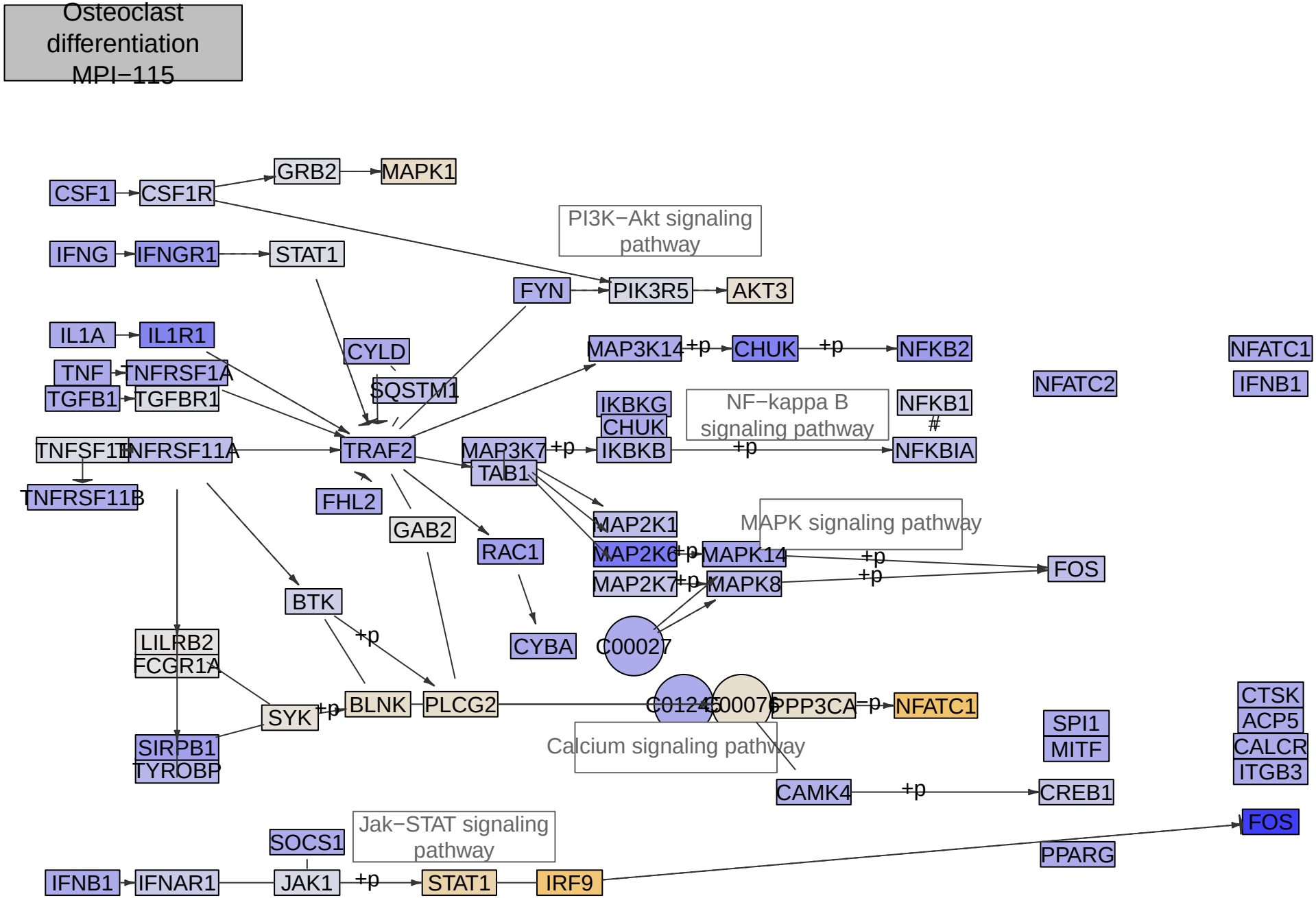
IRF9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CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
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TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
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CYBA
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Calcium signaling pathway
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SOCS1
Jak−STAT signaling pathway
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IFNAR1
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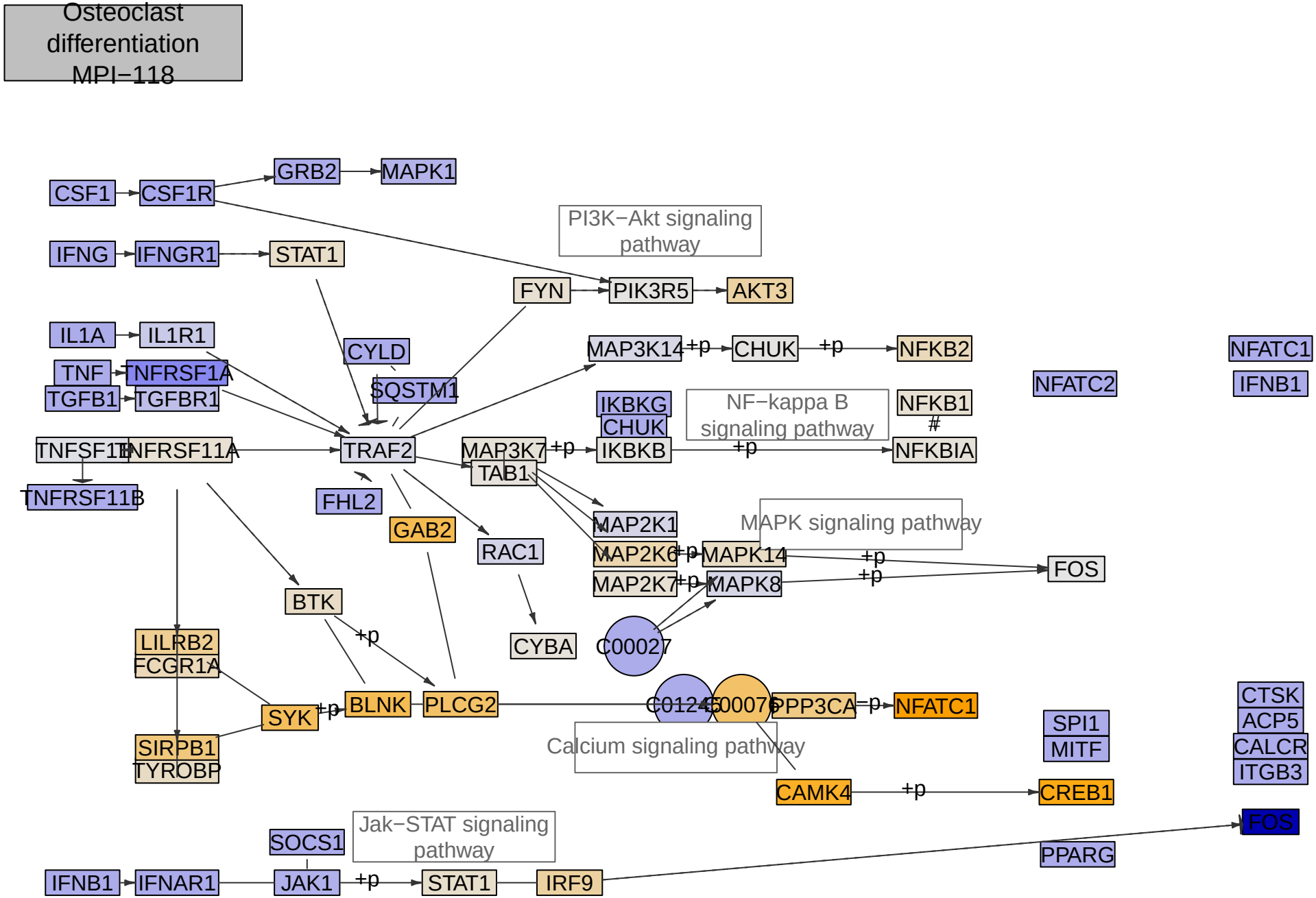
IRF9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CHUK
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NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
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CYBA
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ACP5
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MITF
SIRPB1
TYROBP
Calcium signaling pathway
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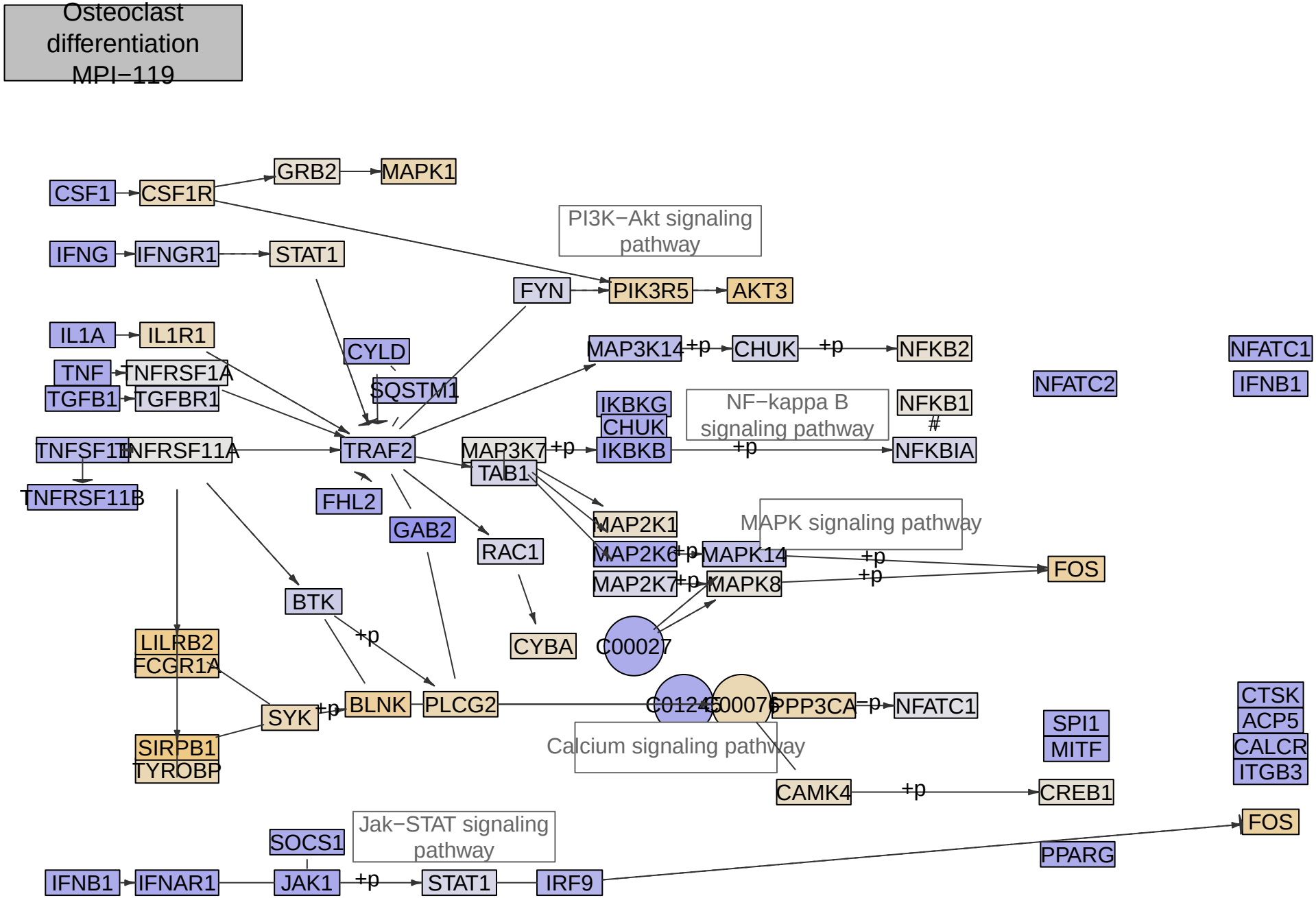
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9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MAPK1
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CSF1R
PI3K−Akt signaling pathway
IFNG
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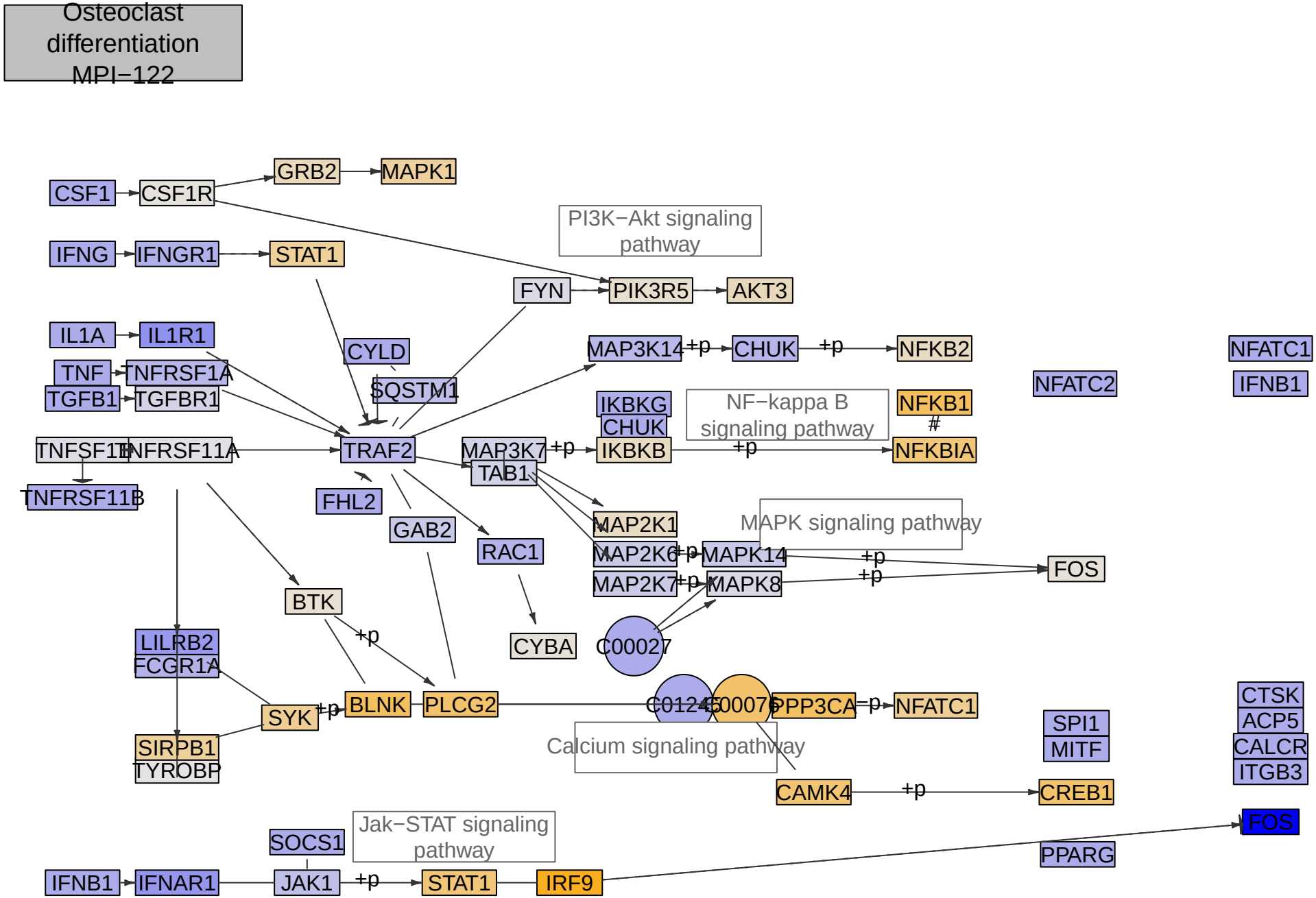
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9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CSF1R
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PI3K−Akt signaling pathway
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STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
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SOCS1
Jak−STAT signaling pathway
FOS
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IFNAR1
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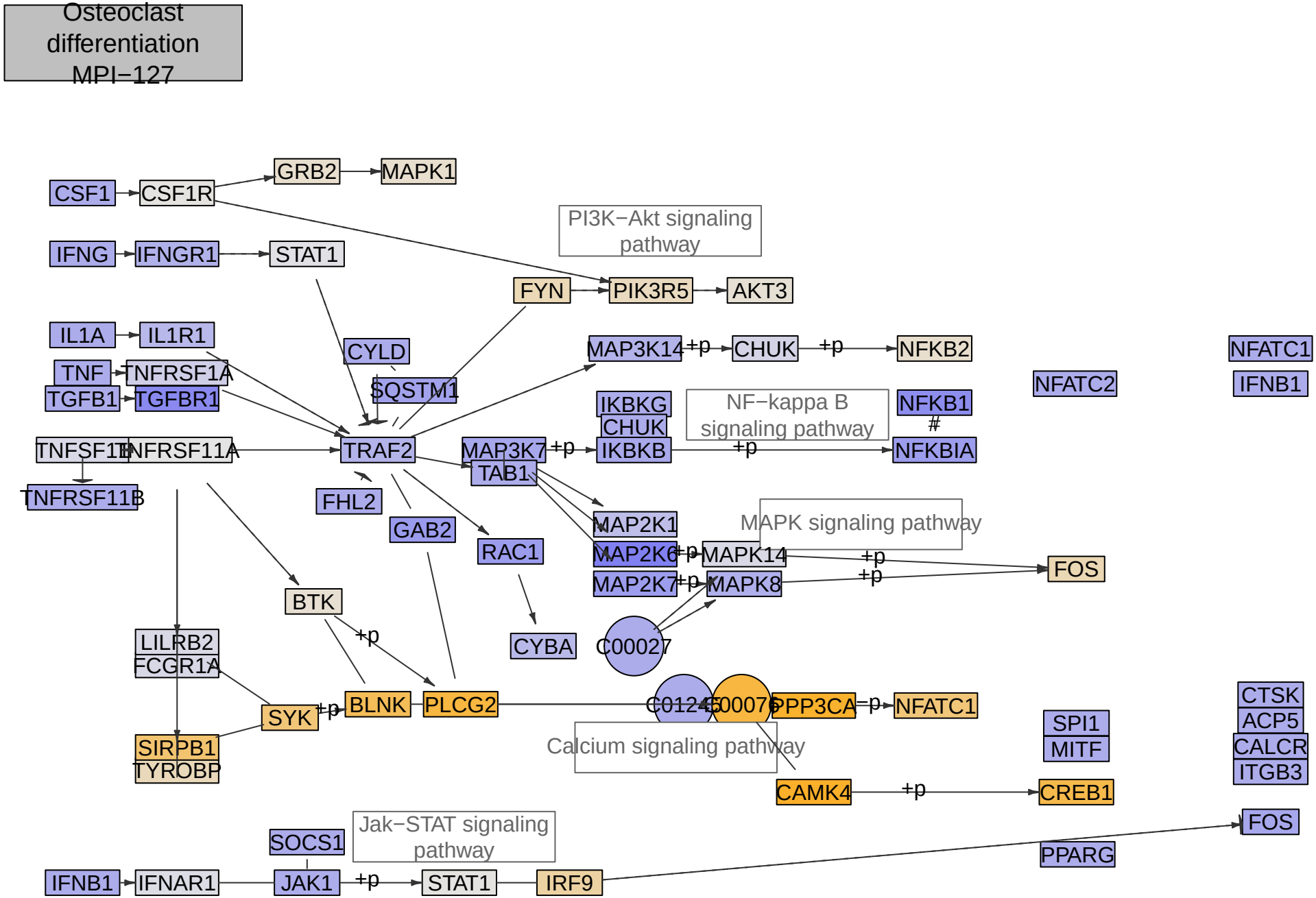
+p
STAT1
IRF9
PPARG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PI3K−Akt signaling pathway
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IFNGR1
STAT1
FYN
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AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
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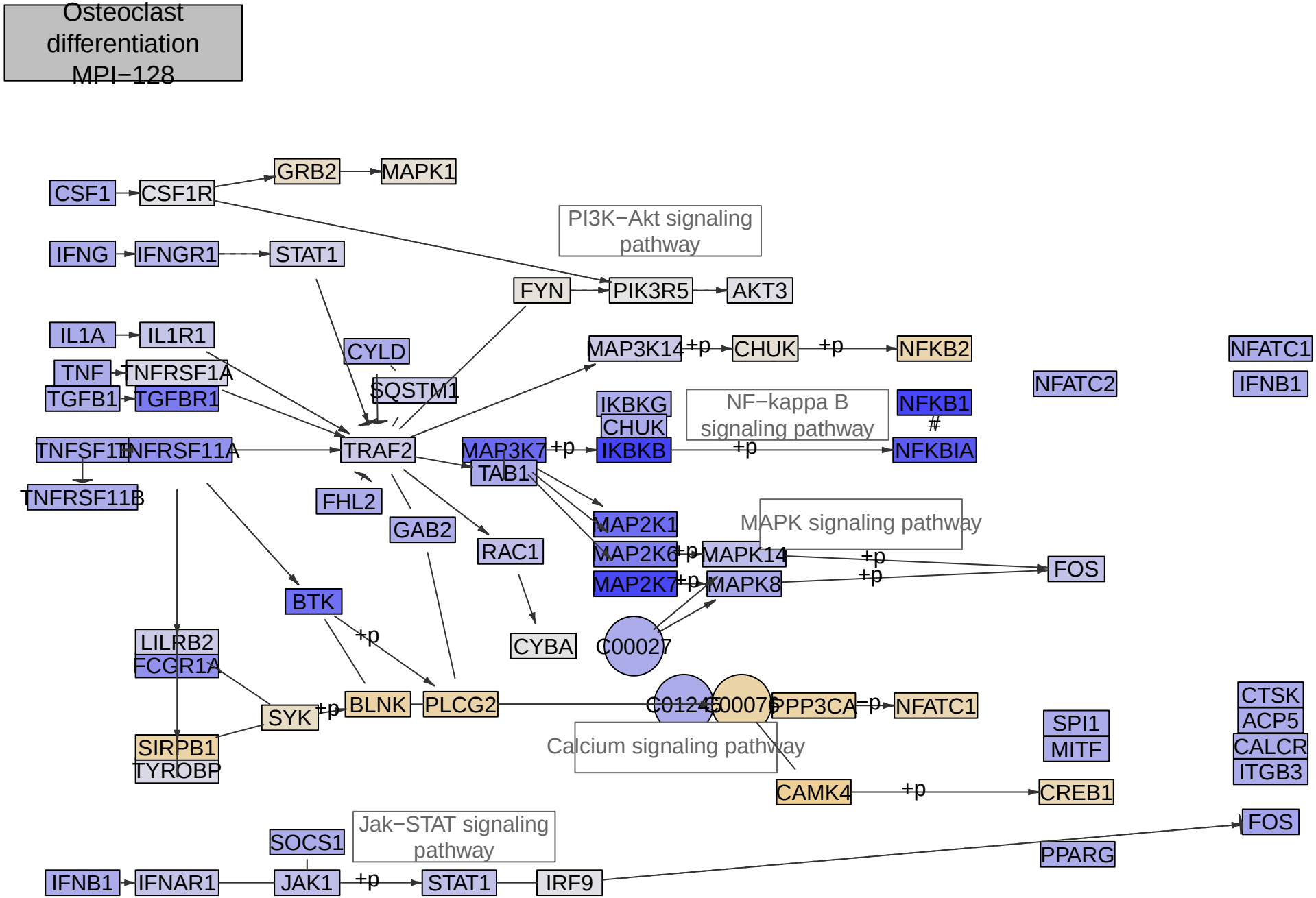
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9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FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
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BLNK
PLCG2
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C00076
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SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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IFNAR1
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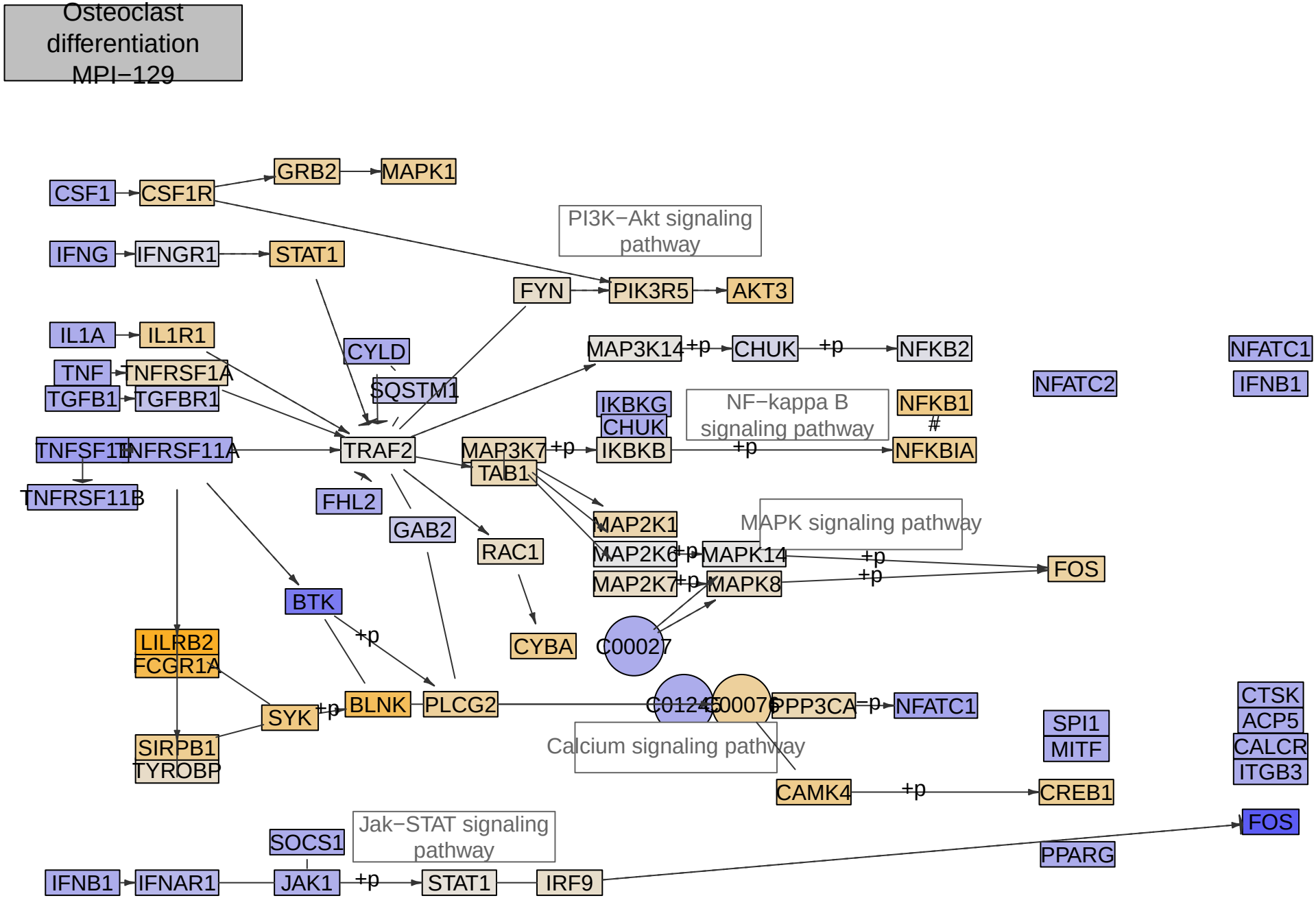
Osteoclast differentiation MPI−129
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FYN
PIK3R5
AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
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TNFRSF1A
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TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
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NFATC1
SPI1
MITF
CTSK
ACP5
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ITGB3
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TYROBP
Calcium signaling pathway
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SOCS1
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IFNAR1
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STAT1
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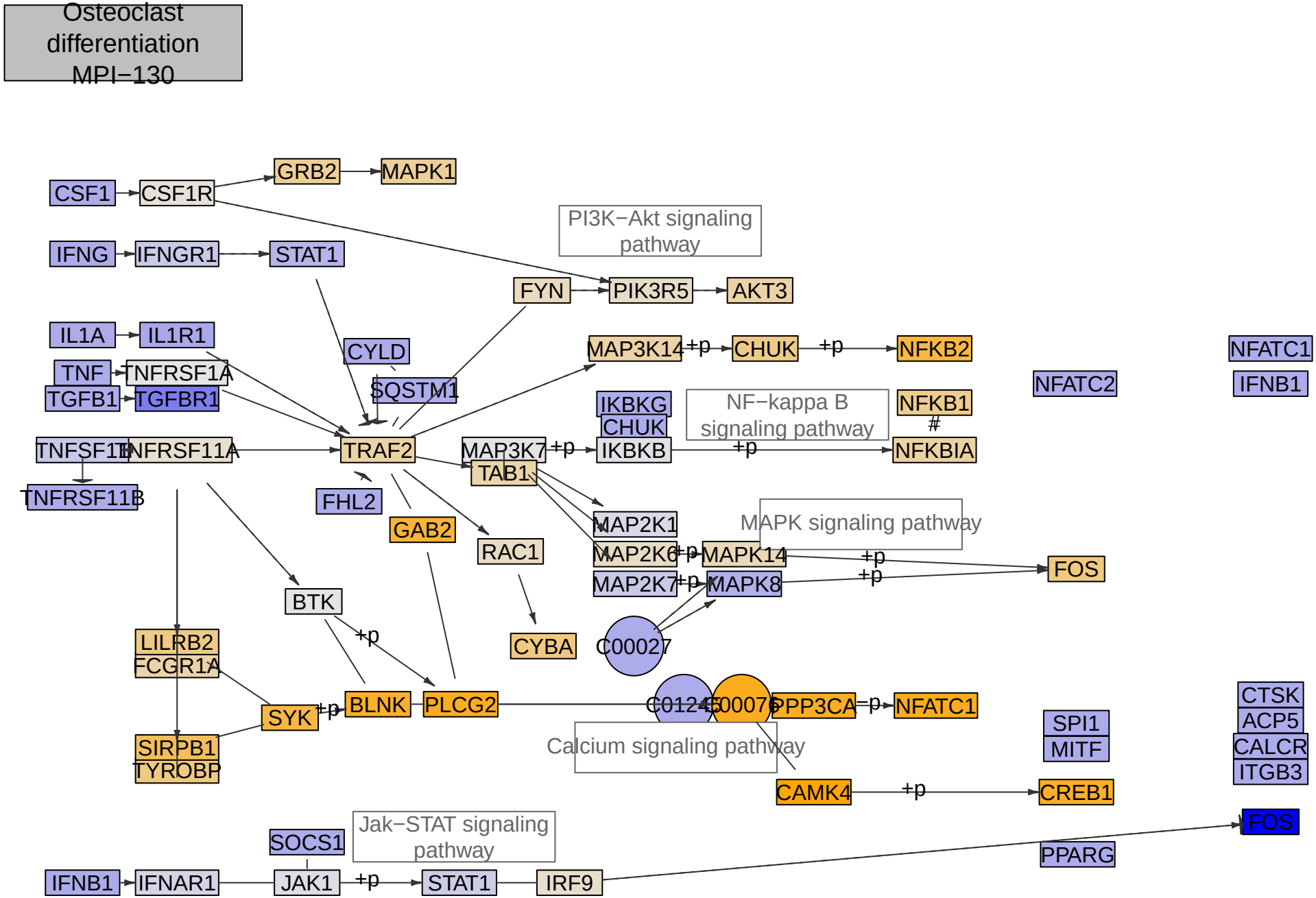
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IL1R1
CYLD
MAP3K14
+p
CHUK
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TNFRSF1A
SQSTM1
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IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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TNFRSF11A
TRAF2
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IKBKB
+p
NFKBIA
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FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
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CYBA
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BLNK
PLCG2
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ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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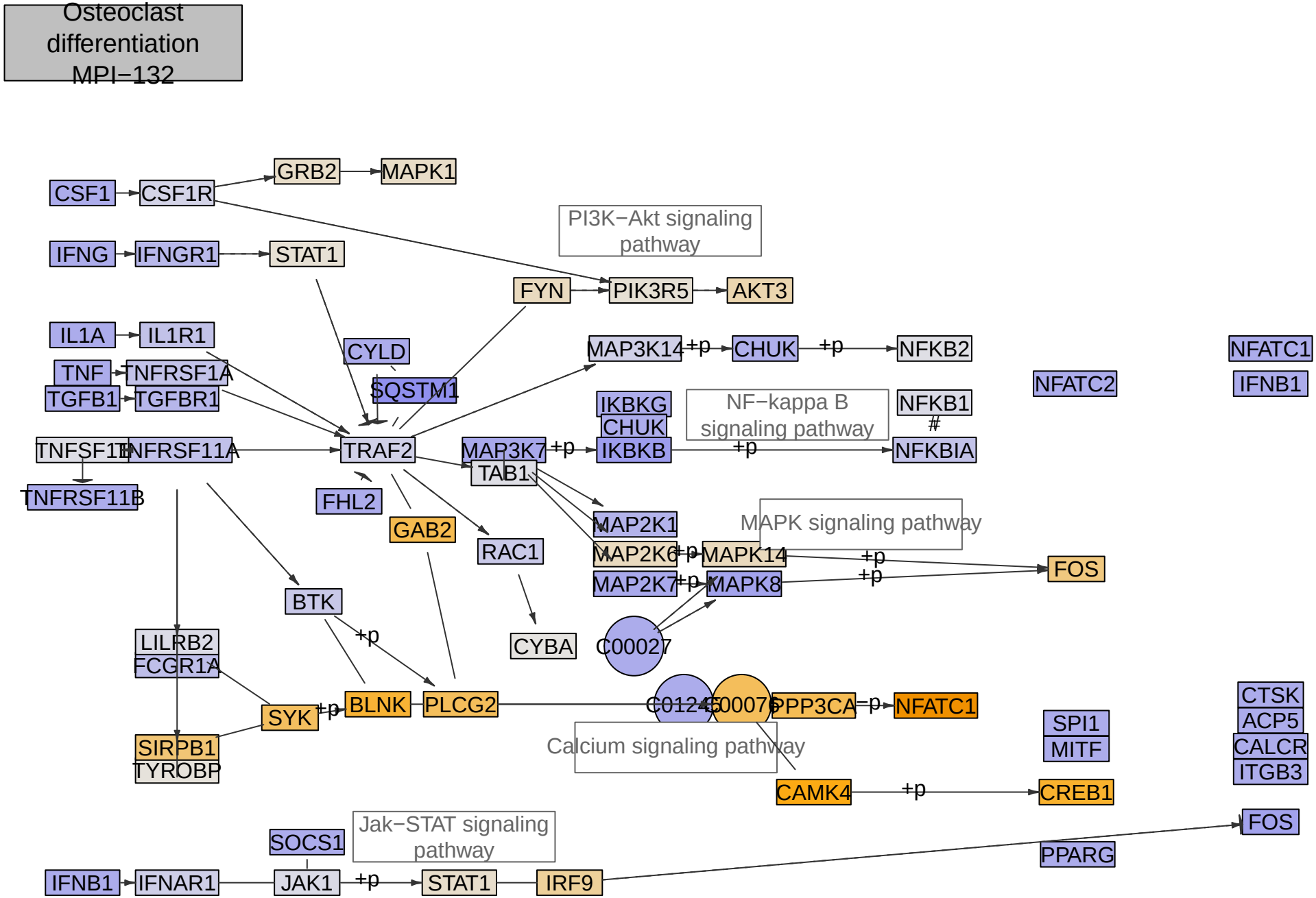
Jak−STAT signaling pathway
FOS
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9
PPARG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STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TRAF2
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IKBKB
+p
NFKBIA
TAB1
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FHL2
GAB2
MAP2K1
MAPK signaling pathway
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MAP2K6
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MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
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ACP5
CALCR
ITGB3
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TYROBP
Calcium signaling pathway
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SOCS1
Jak−STAT signaling pathway
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IFNAR1
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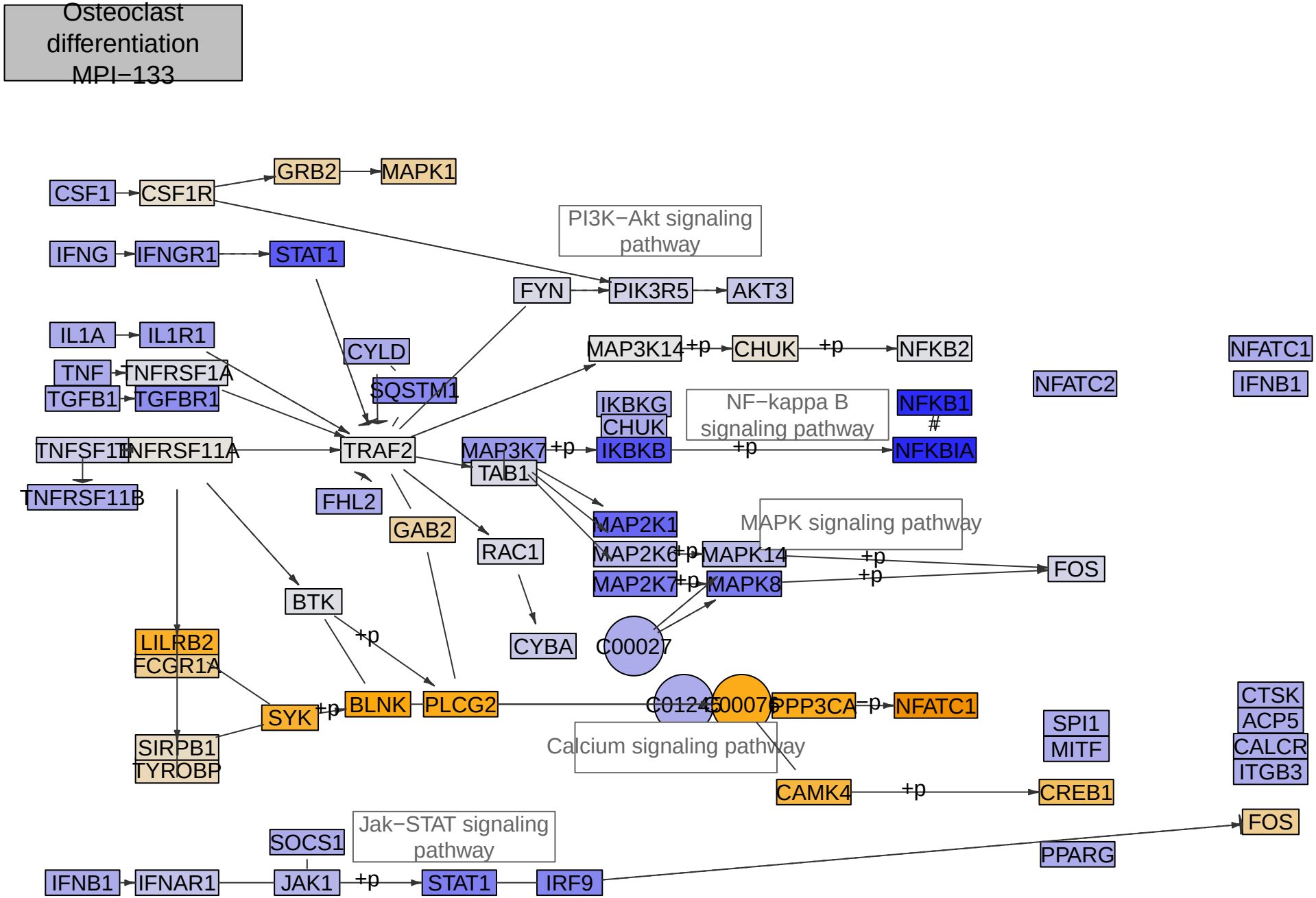
STAT1
IRF9
PPARG


Osteoclast differentiation MPI−133
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FYN
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AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
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TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
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+p
IKBKB
+p
NFKBIA
TAB1
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FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
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MAP2K7
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MAPK8
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Jak−STAT signaling pathway
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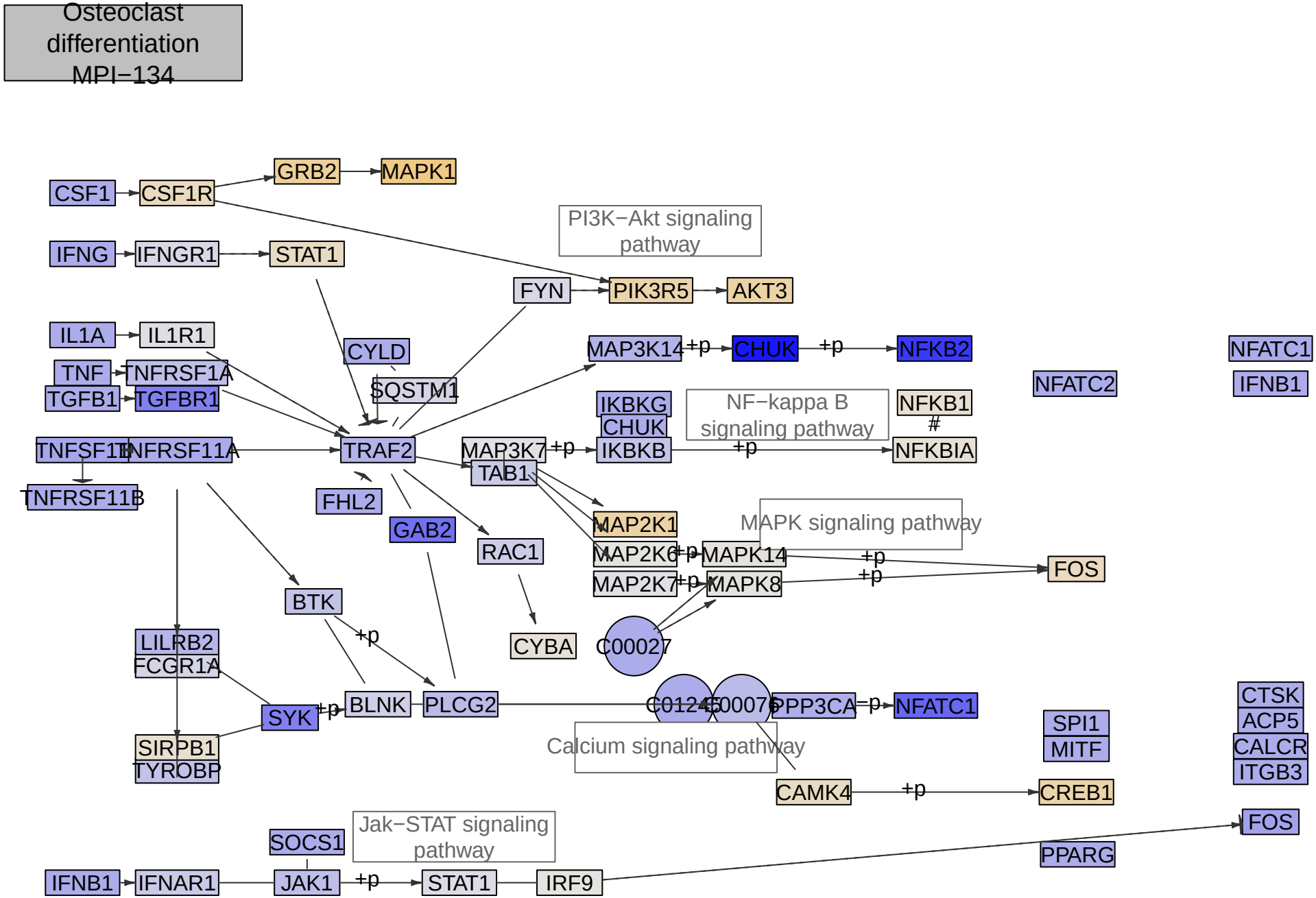
Osteoclast differentiation MPI−134
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TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TRAF2
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+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
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MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
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Jak−STAT signaling pathway
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IFNAR1
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STAT1
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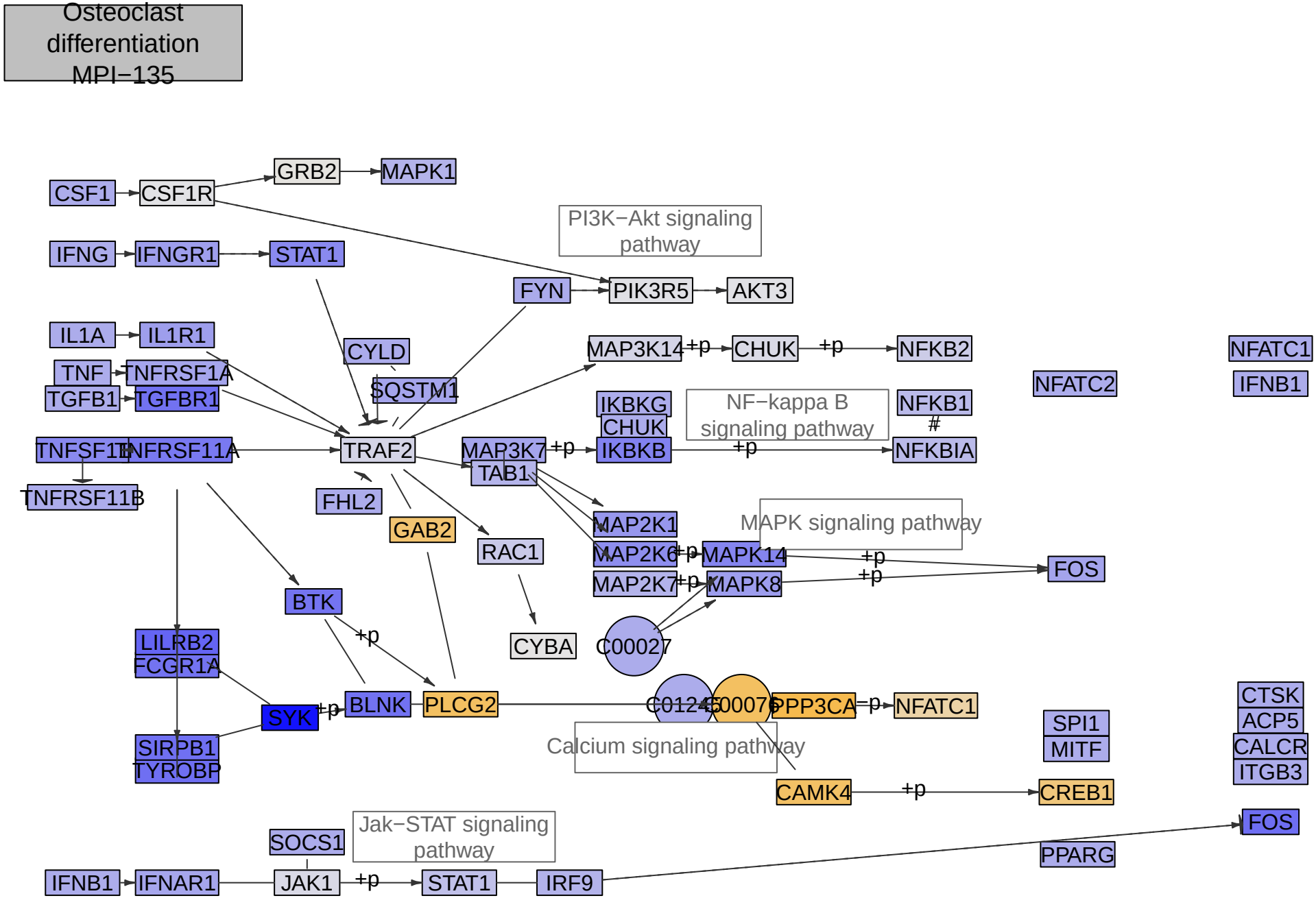
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TNFRSF1A
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TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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IKBKB
+p
NFKBIA
TAB1
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FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
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FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
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FCGR1A
CYBA
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BLNK
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Calcium signaling pathway
SPI1
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SIRPB1
TYROBP
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Jak−STAT signaling pathway
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IFNAR1
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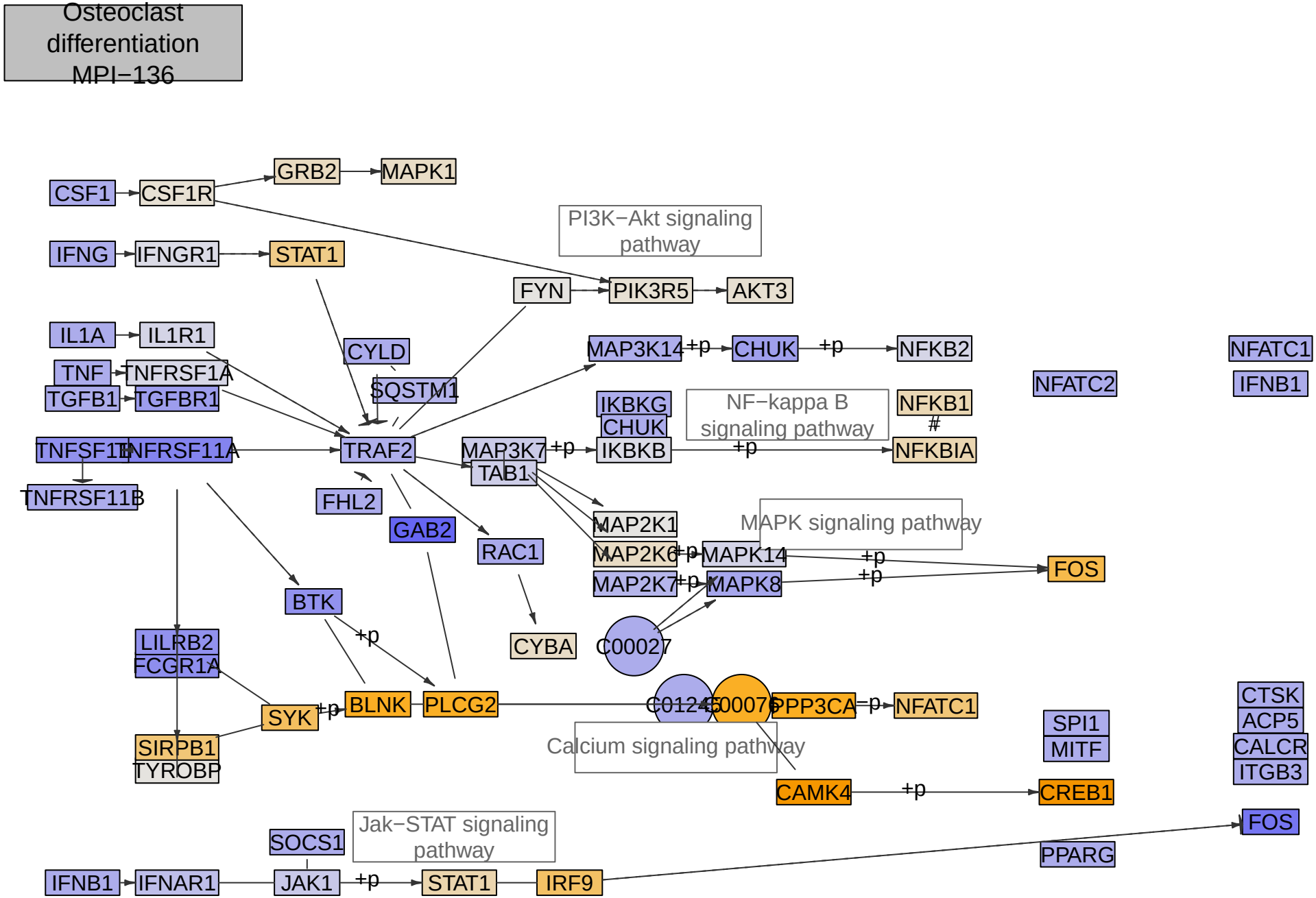
IRF9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TNF
TNFRSF1A
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IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
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+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
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MAP2K7
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MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
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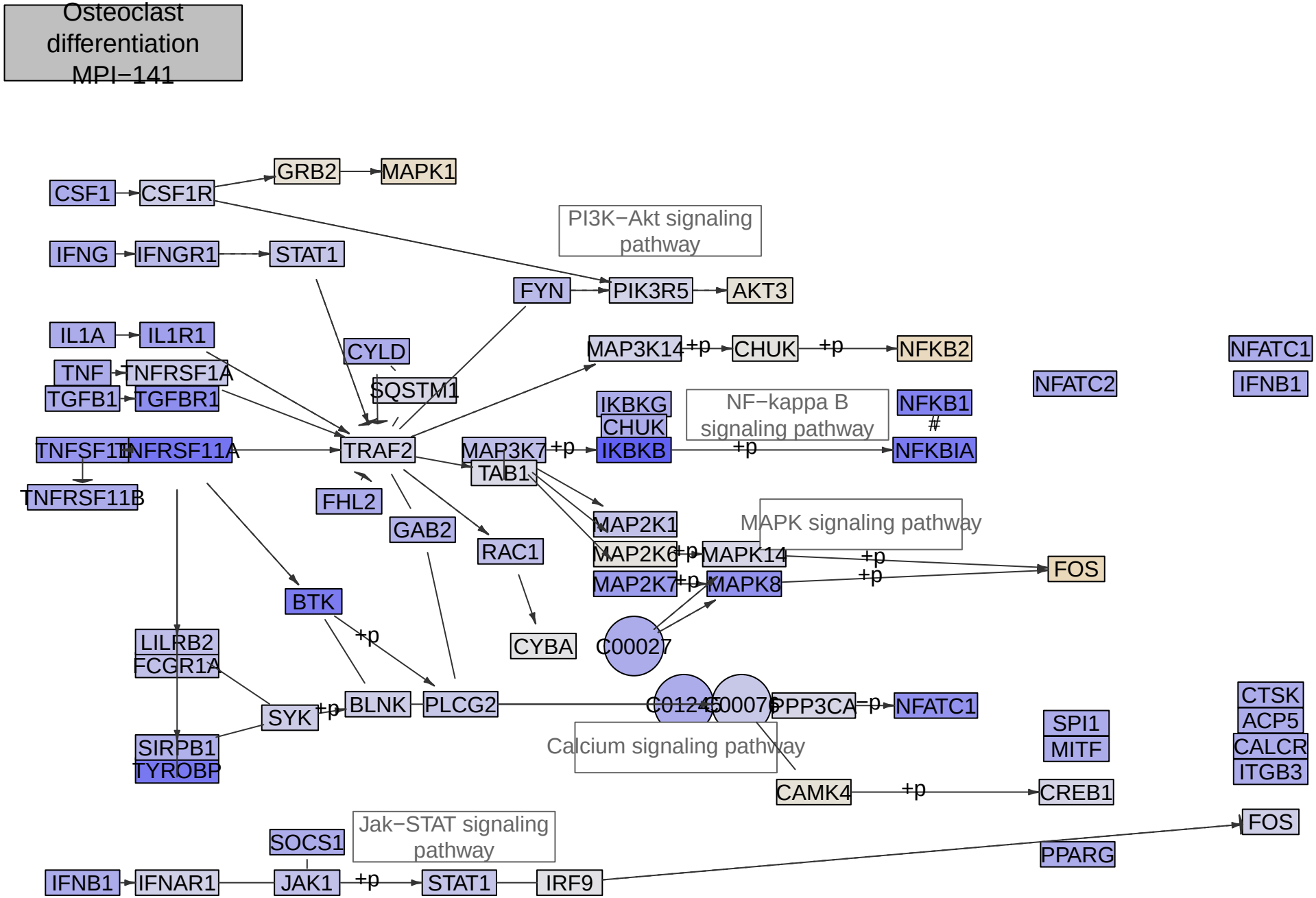
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CYLD
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CHUK
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NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
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IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
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CTSK
ACP5
SPI1
MITF
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ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
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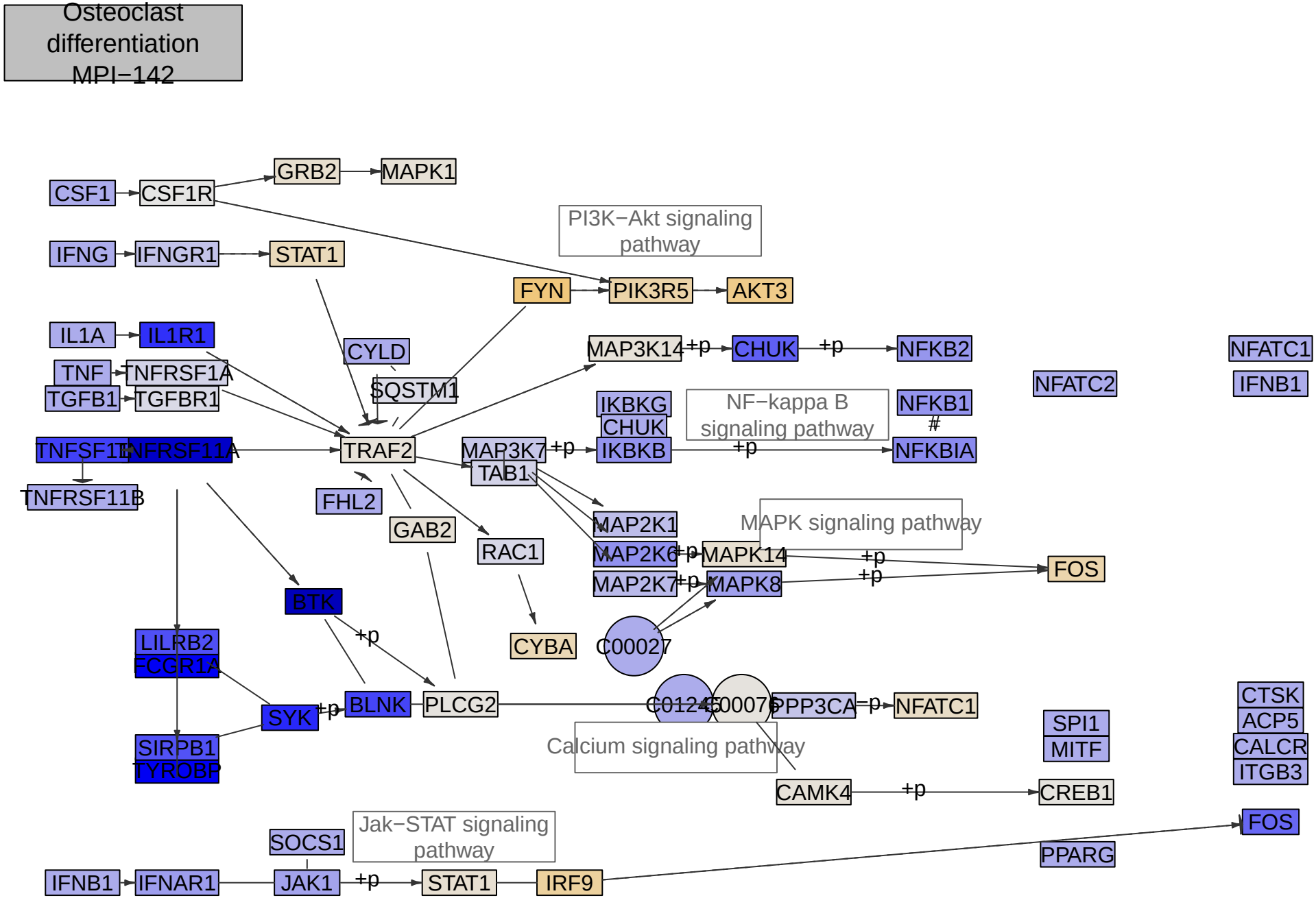
+p
STAT1
IRF9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AKT3
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CYLD
MAP3K14
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CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
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PPP3CA
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NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
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Jak−STAT signaling pathway
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IFNAR1
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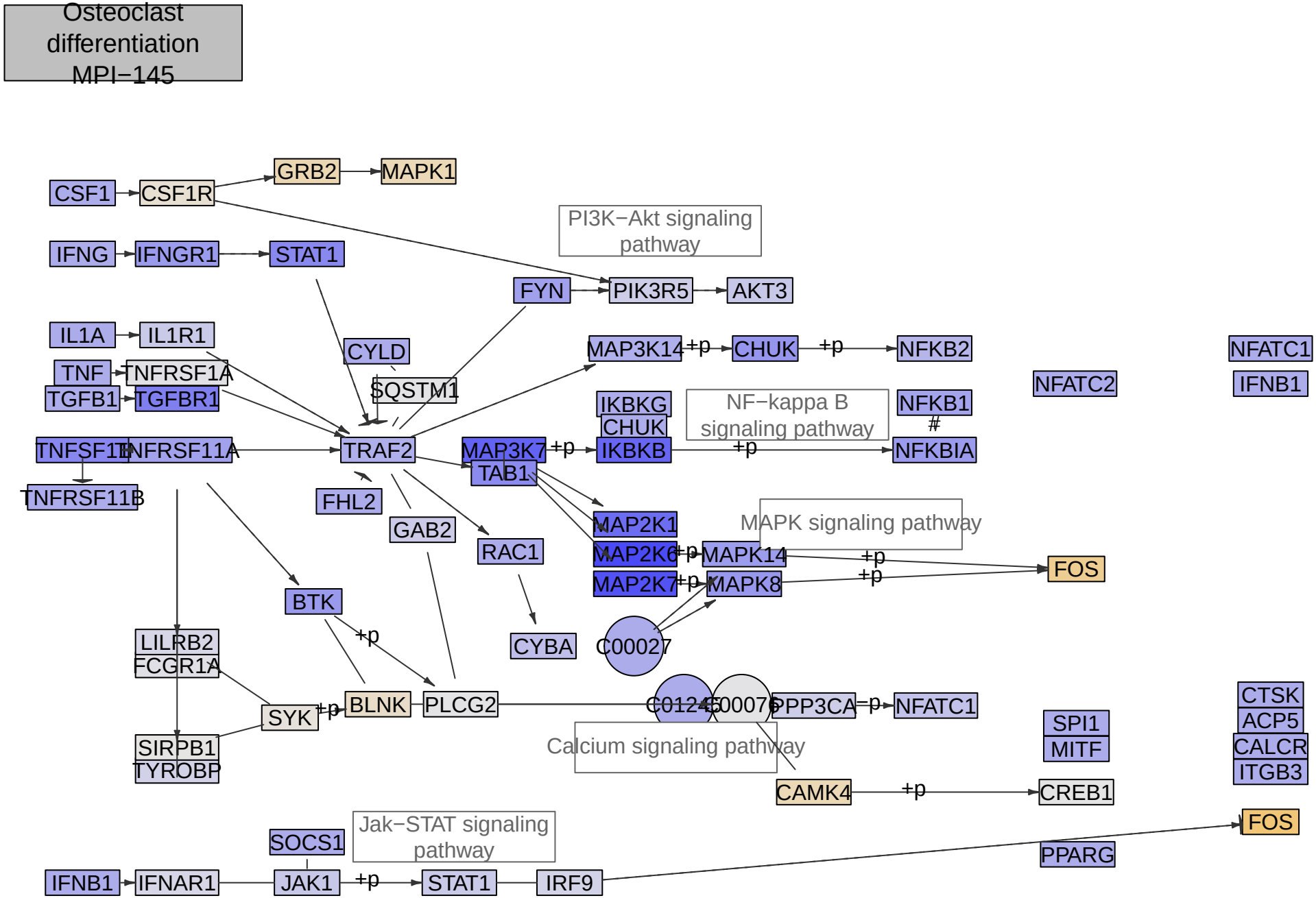
IRF9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CYLD
MAP3K14
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CHUK
+p
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TNF
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IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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MAP3K7
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+p
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TAB1
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FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
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MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
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CYBA
C00027
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+p
BLNK
PLCG2
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C00076
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CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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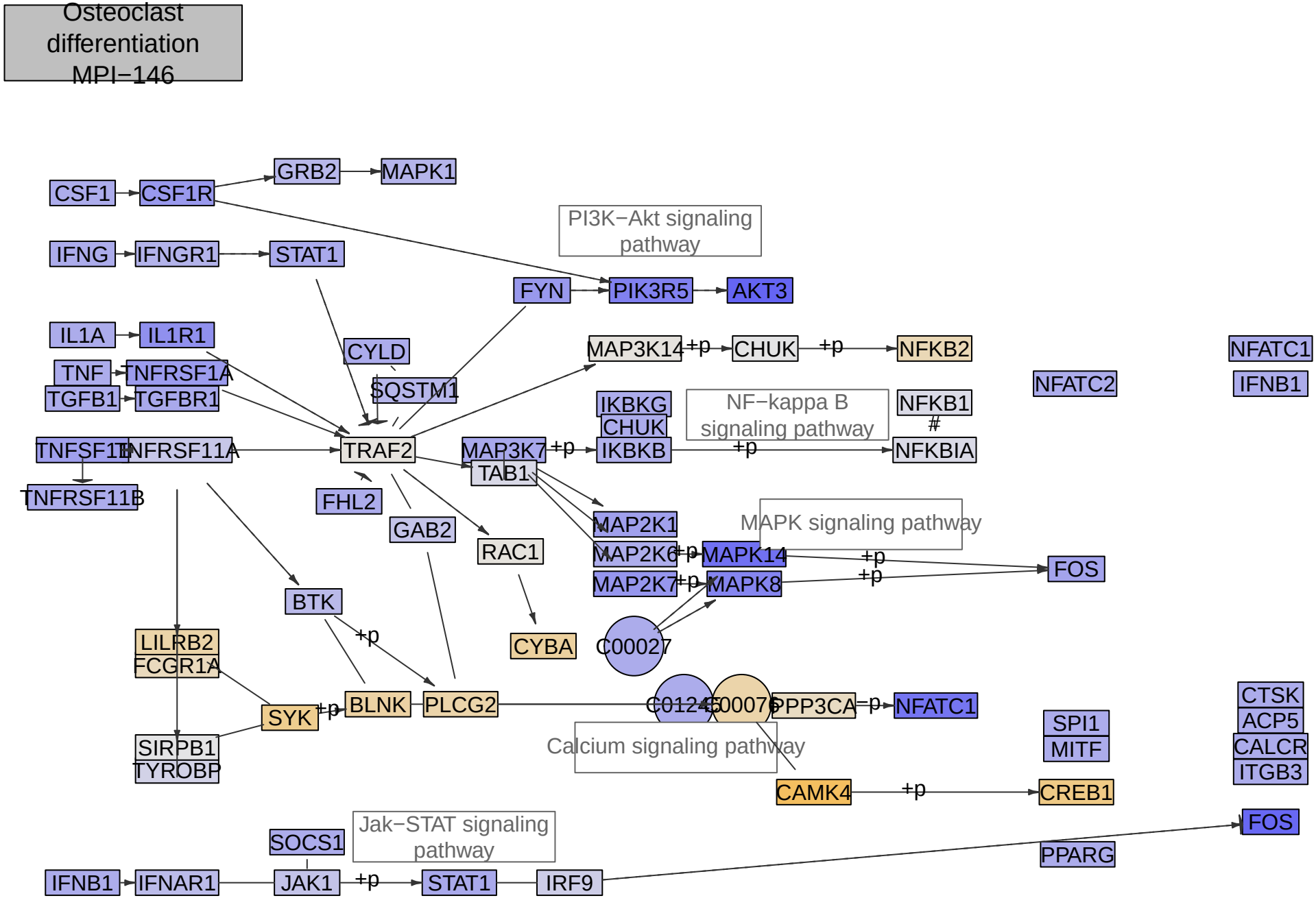
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NF−kappa B signaling pathway
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TNFRSF11A
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TAB1
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FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
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+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
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FCGR1A
CYBA
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ACP5
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Calcium signaling pathway
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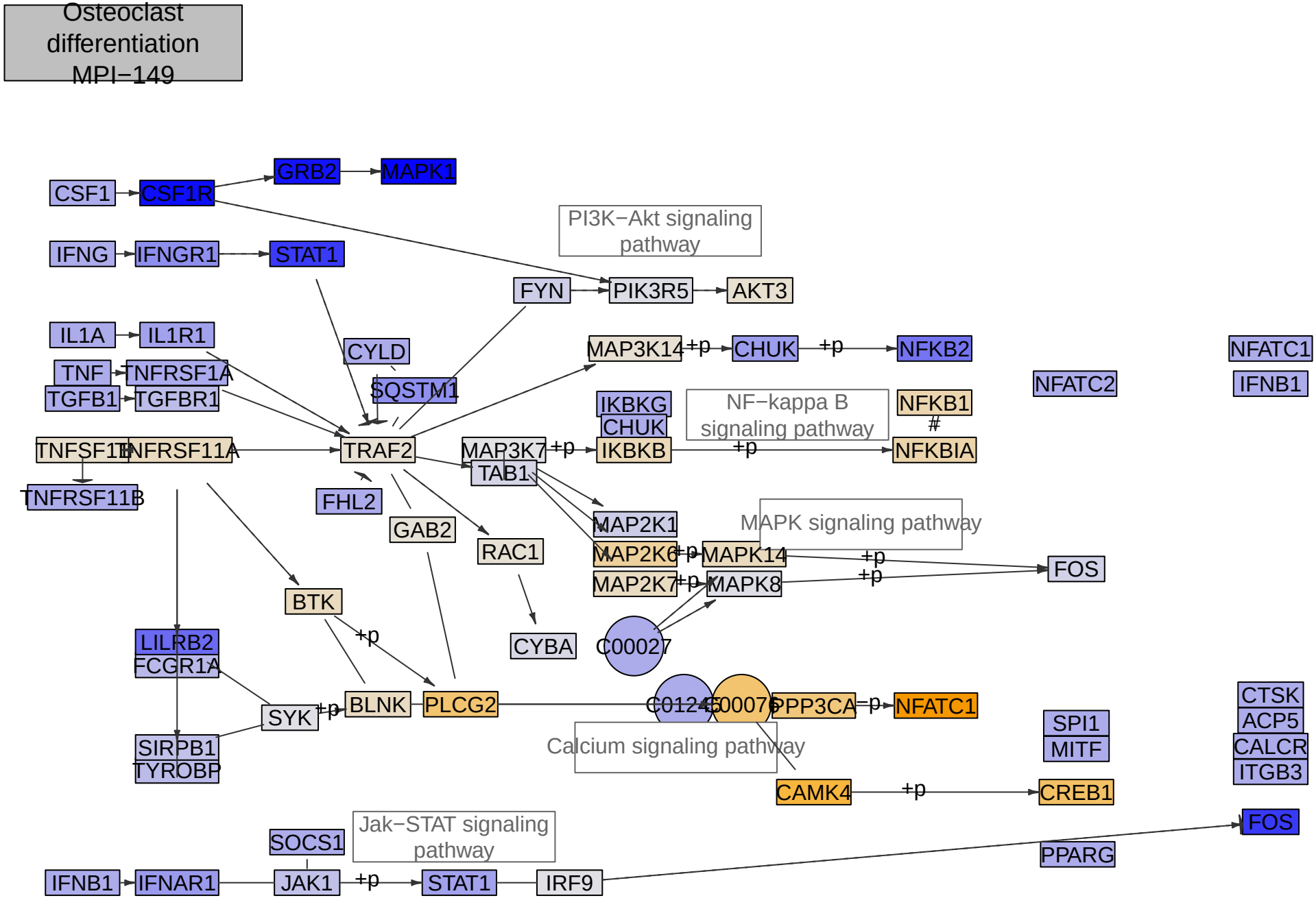
IRF9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CHUK
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TNFRSF1A
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TAB1
TNFRSF11B
FHL2
GAB2
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MAPK signaling pathway
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MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
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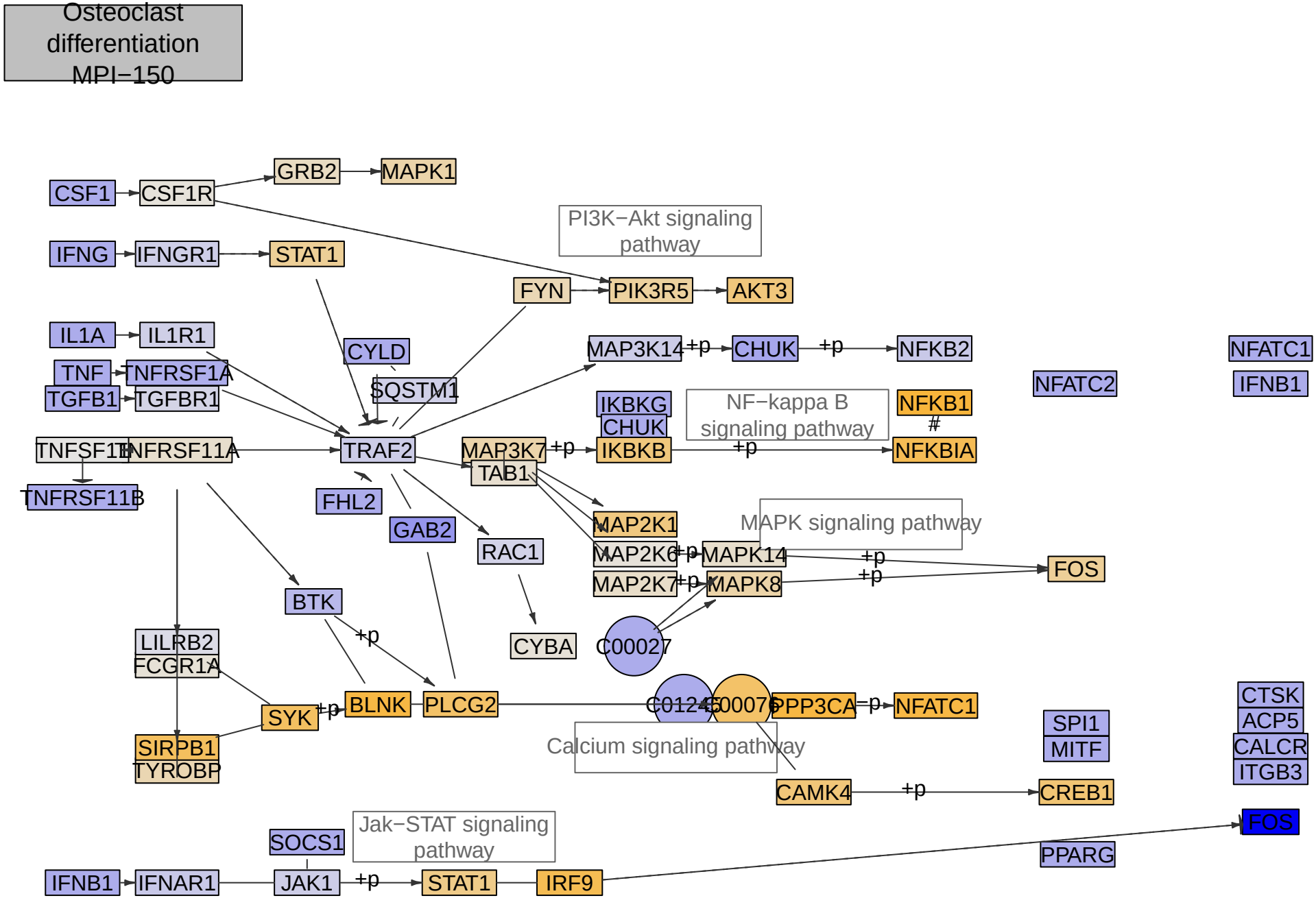
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FOS
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MAPK8
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LILRB2
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+p
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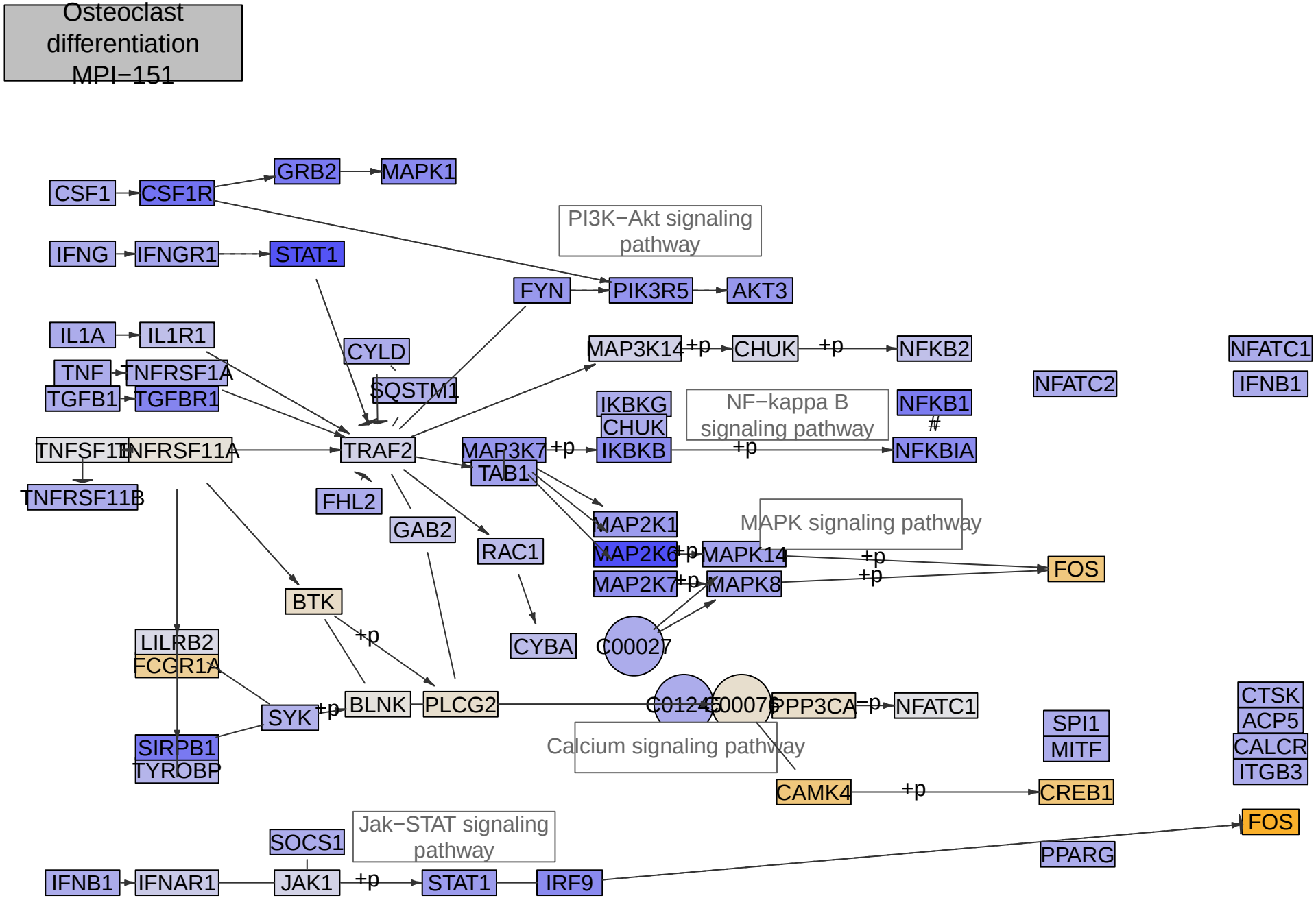
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MAPK14
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MAP2K7
+p
MAPK8
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BTK
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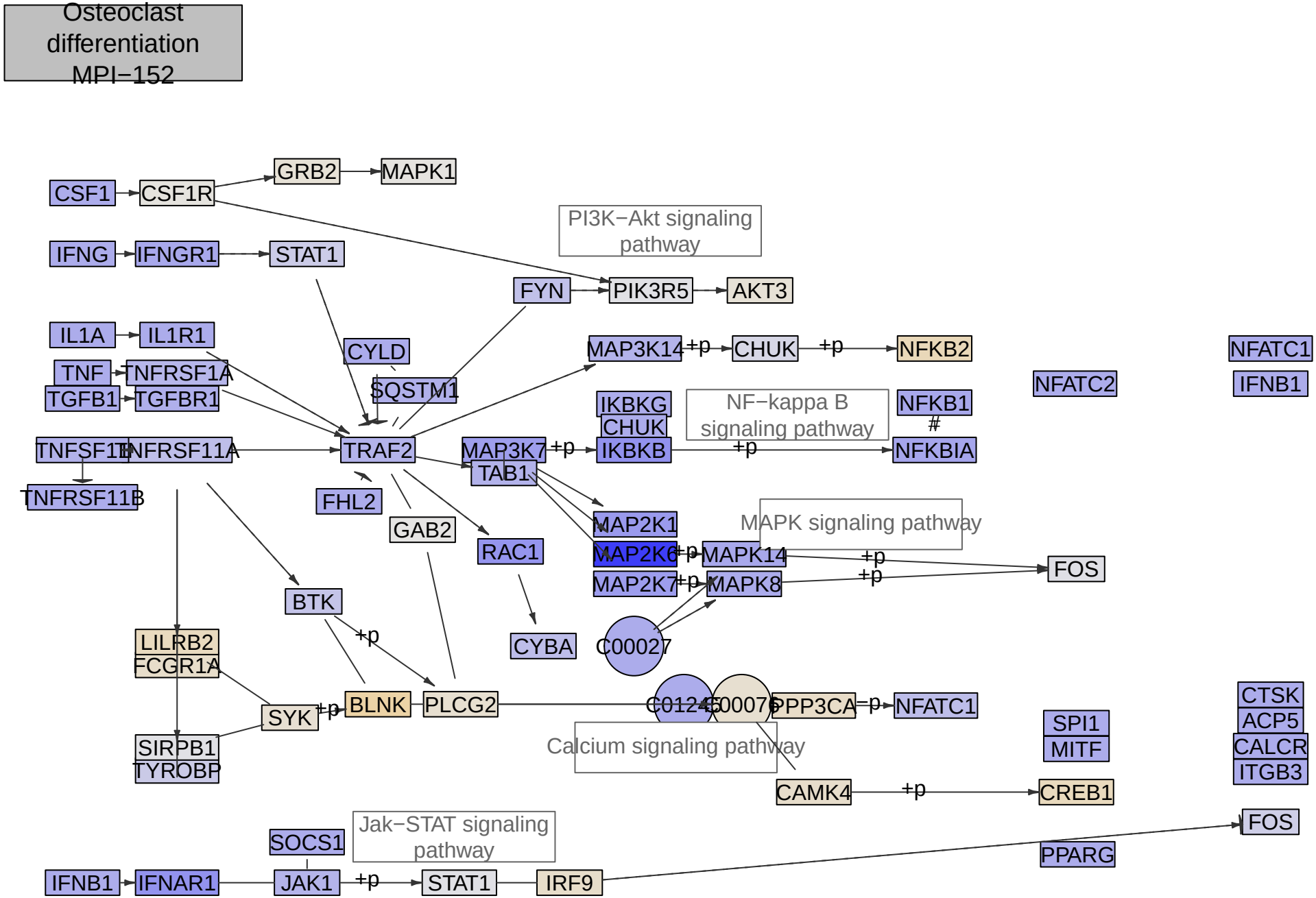
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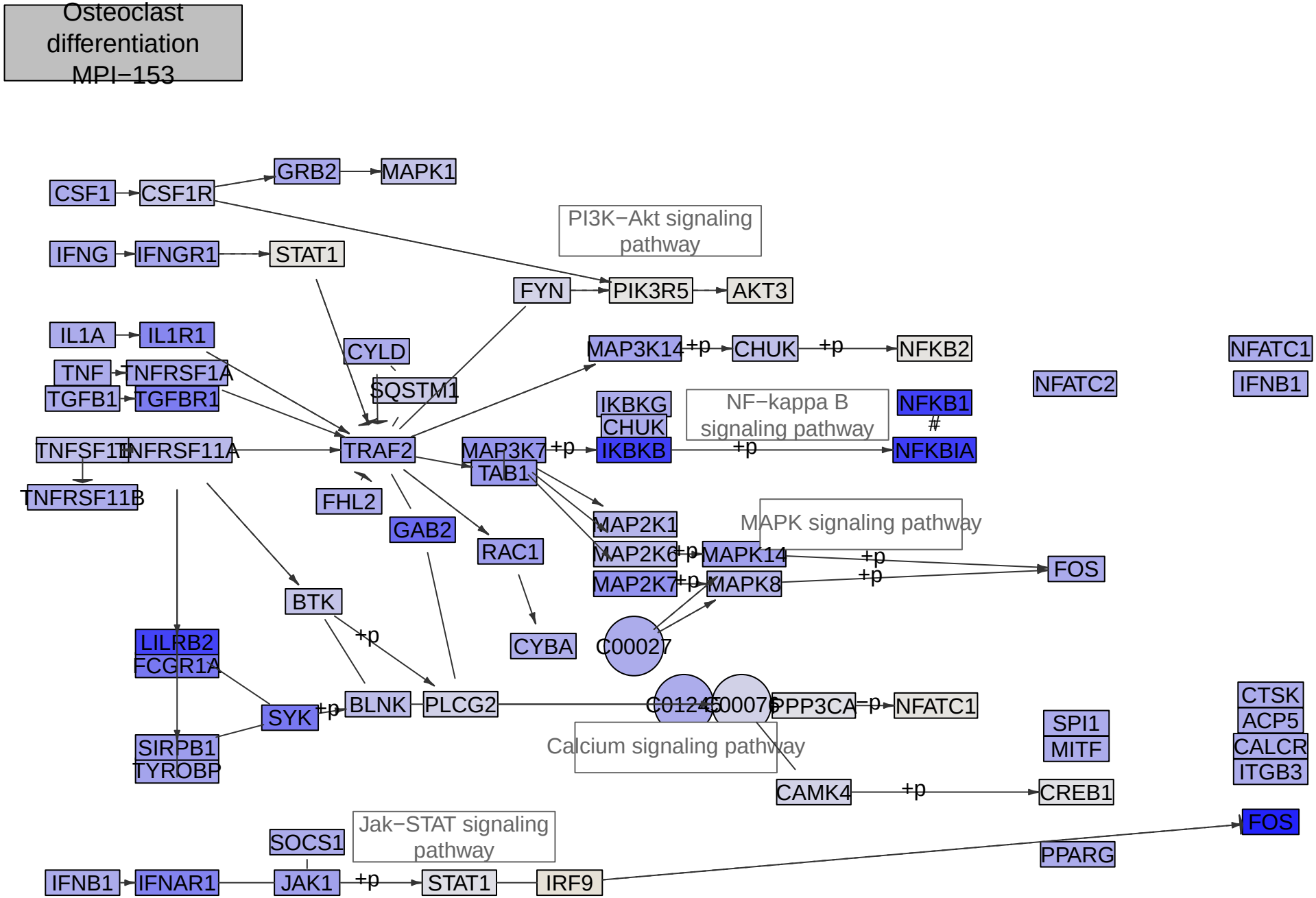
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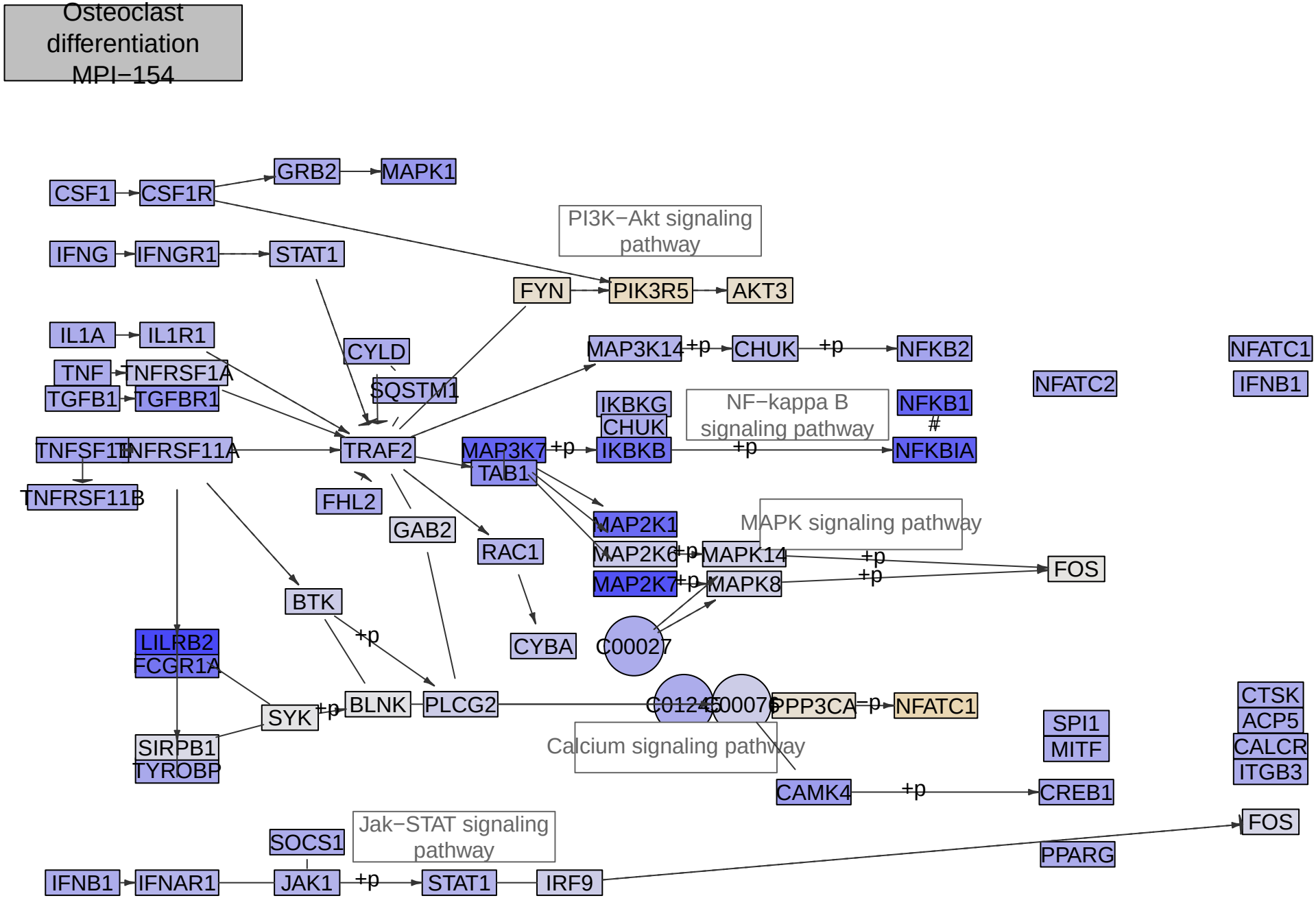
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NF−kappa B signaling pathway
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GAB2
MAP2K1
MAPK signaling pathway
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MAPK14
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FOS
MAP2K7
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MAPK8
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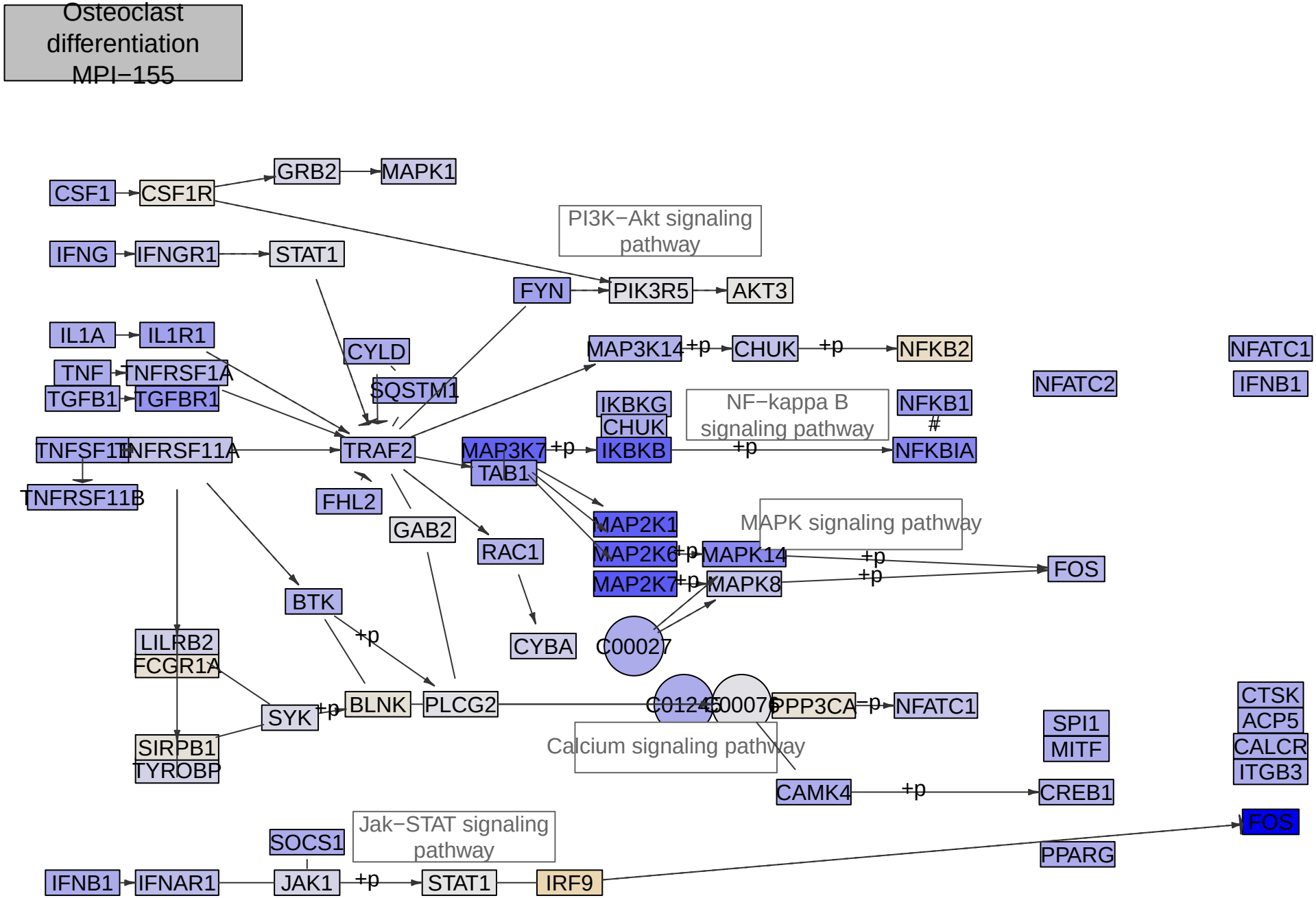
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NF−kappa B signaling pathway
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NFKBIA
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MAP2K1
MAPK signaling pathway
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MAP2K6
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Calcium signaling pathway
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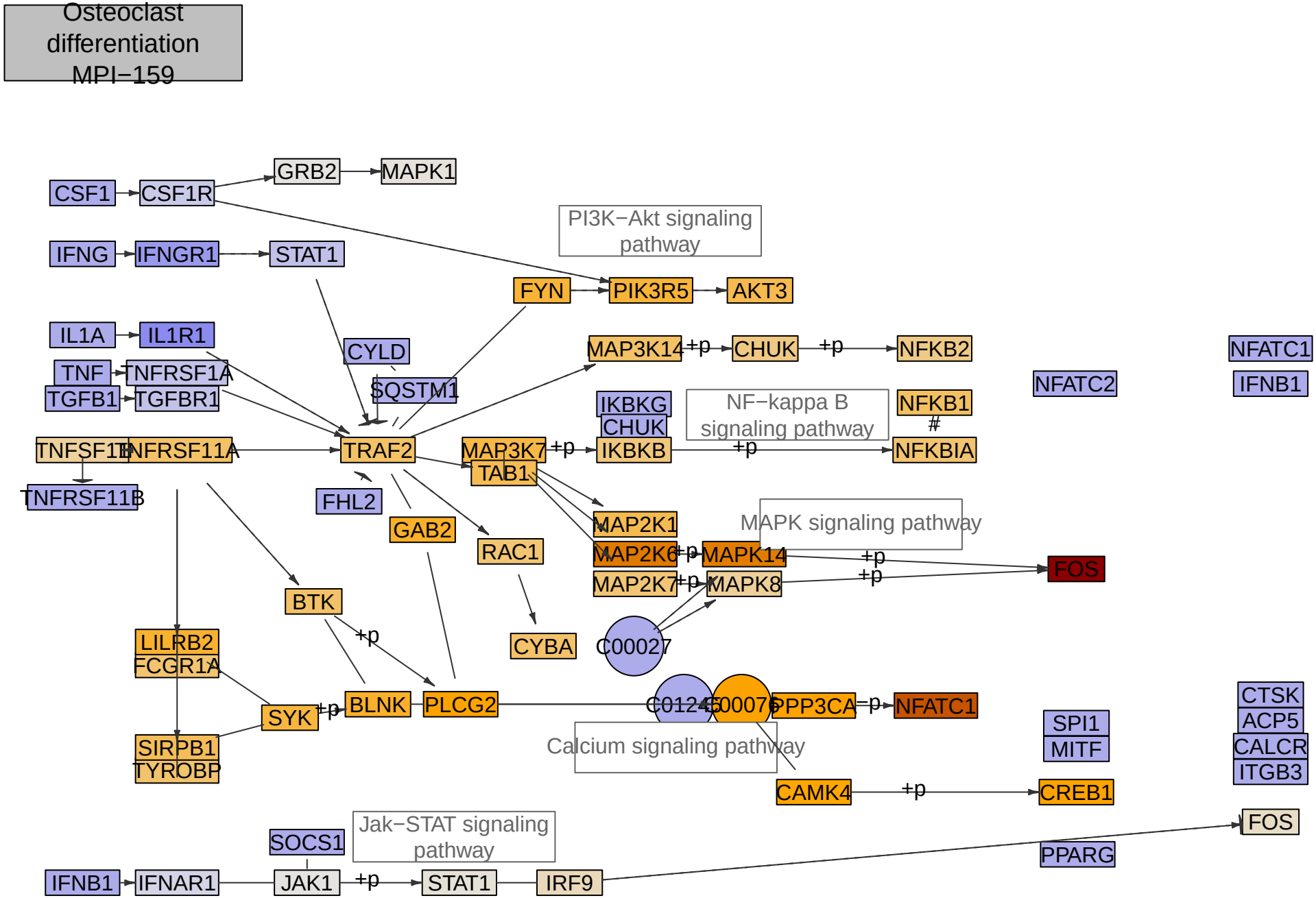
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CHUK
NF−kappa B signaling pathway
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TNFRSF11A
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+p
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MAP2K1
MAPK signaling pathway
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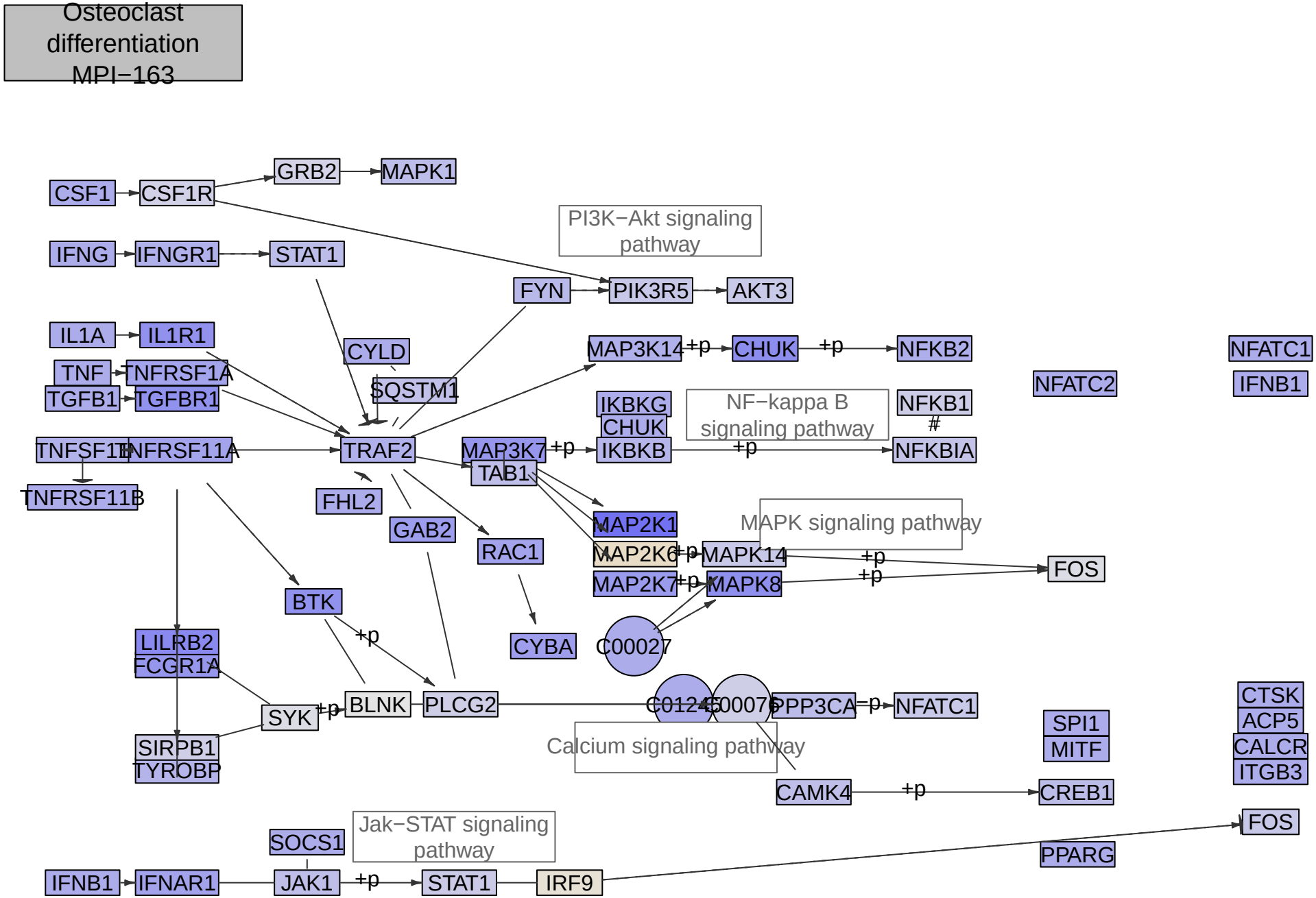
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TGFBR1
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CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
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MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
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RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
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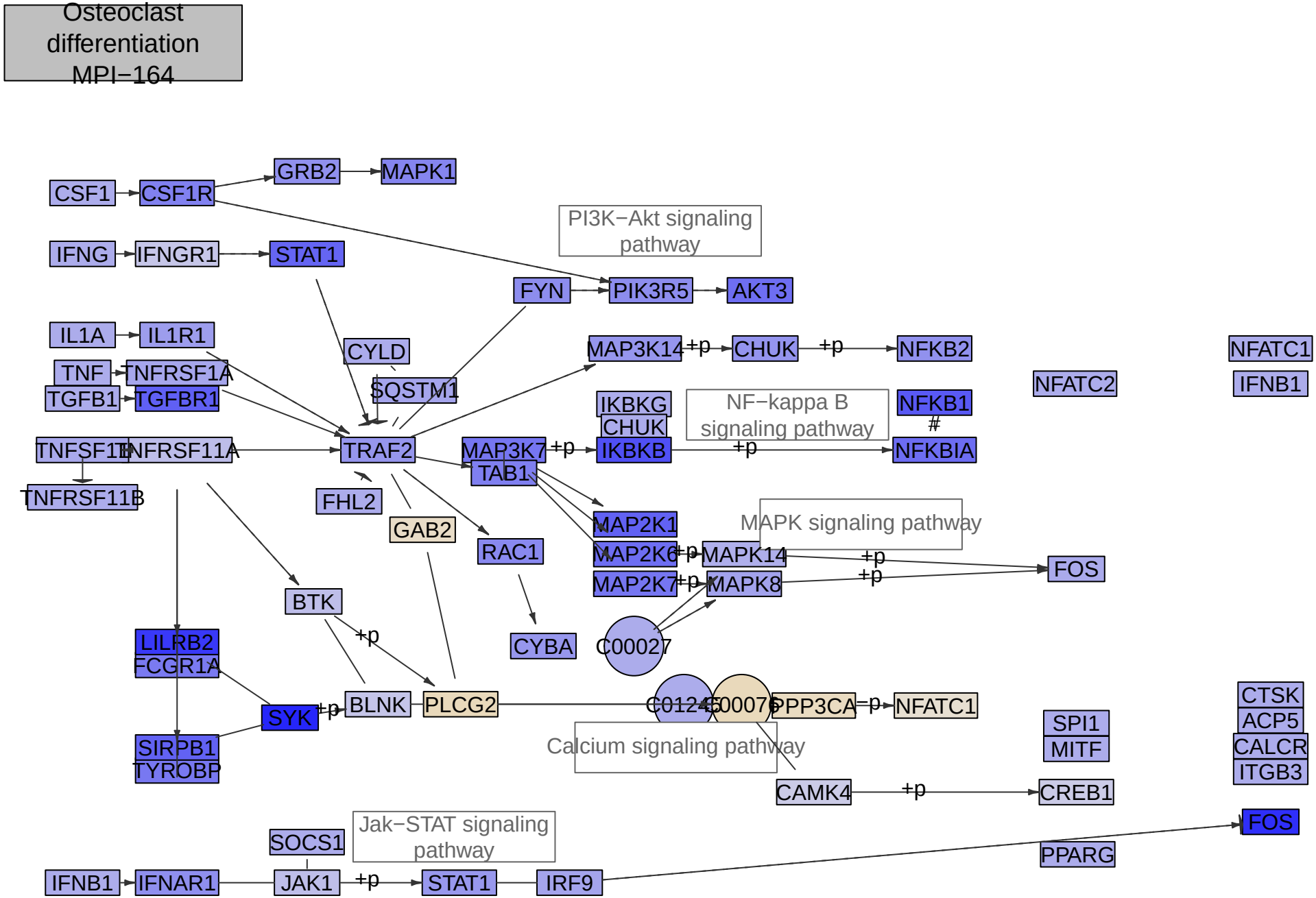
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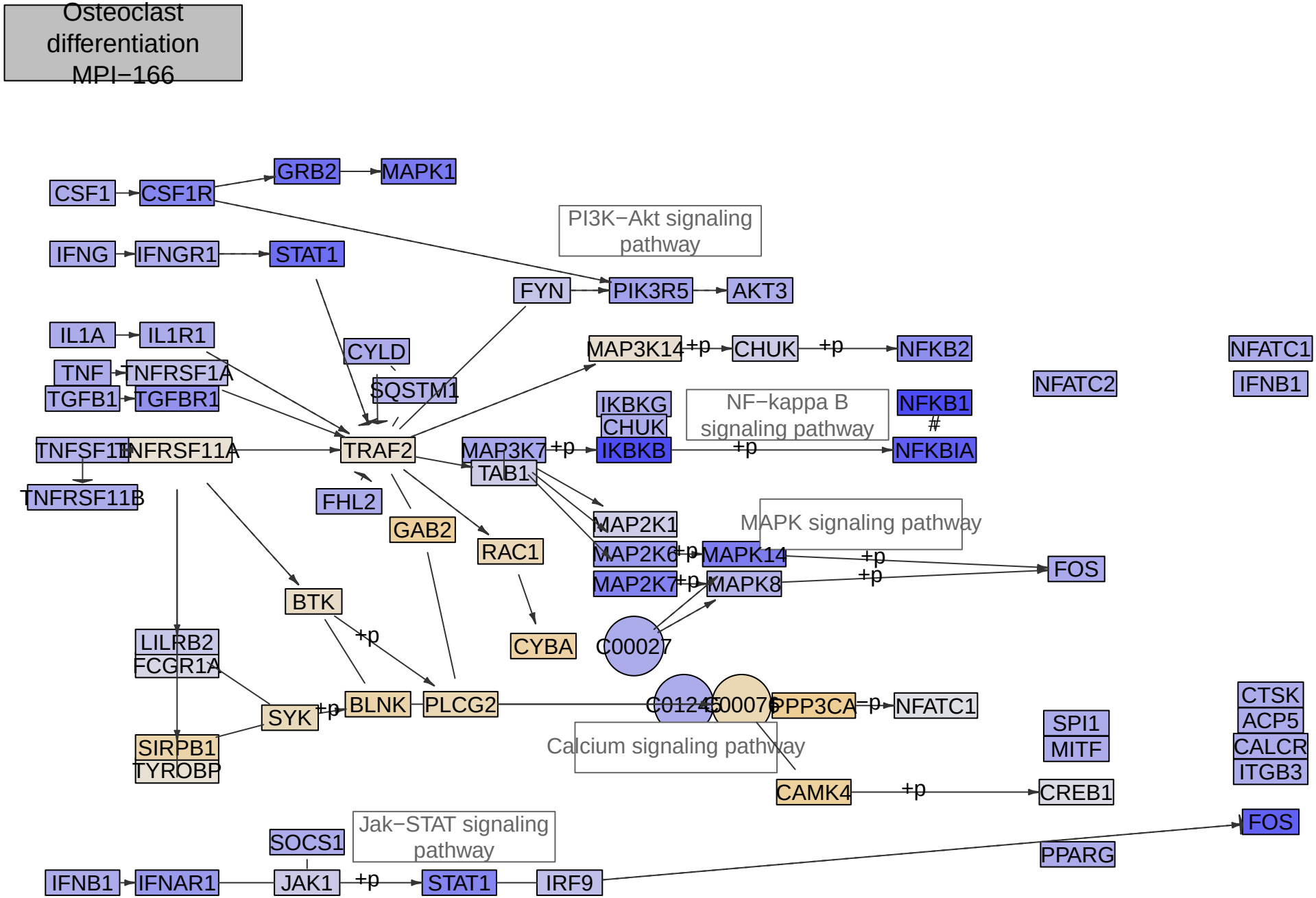
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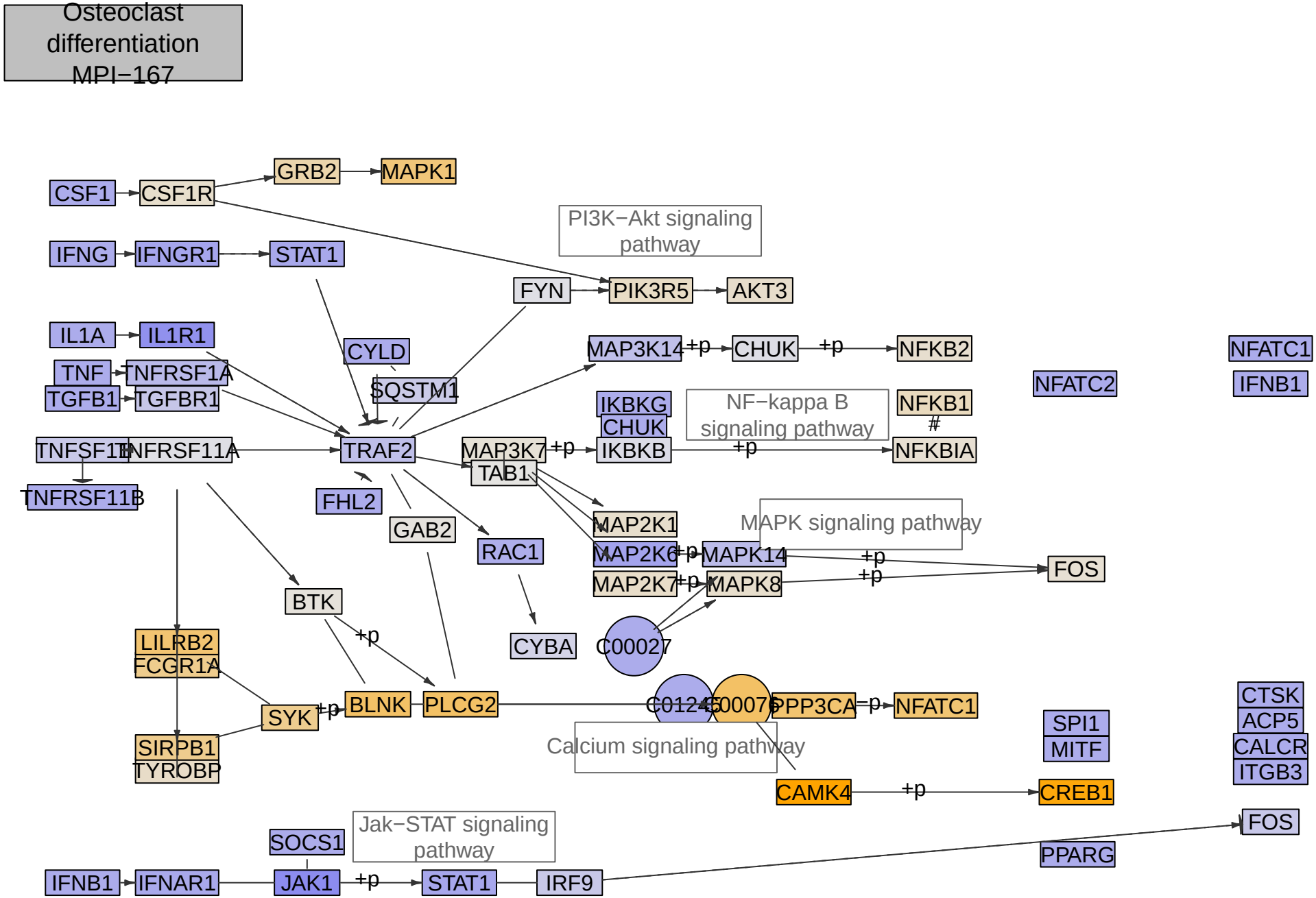
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TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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TNFRSF11A
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MAP3K7
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MAPK signaling pathway
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MAPK14
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FOS
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BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
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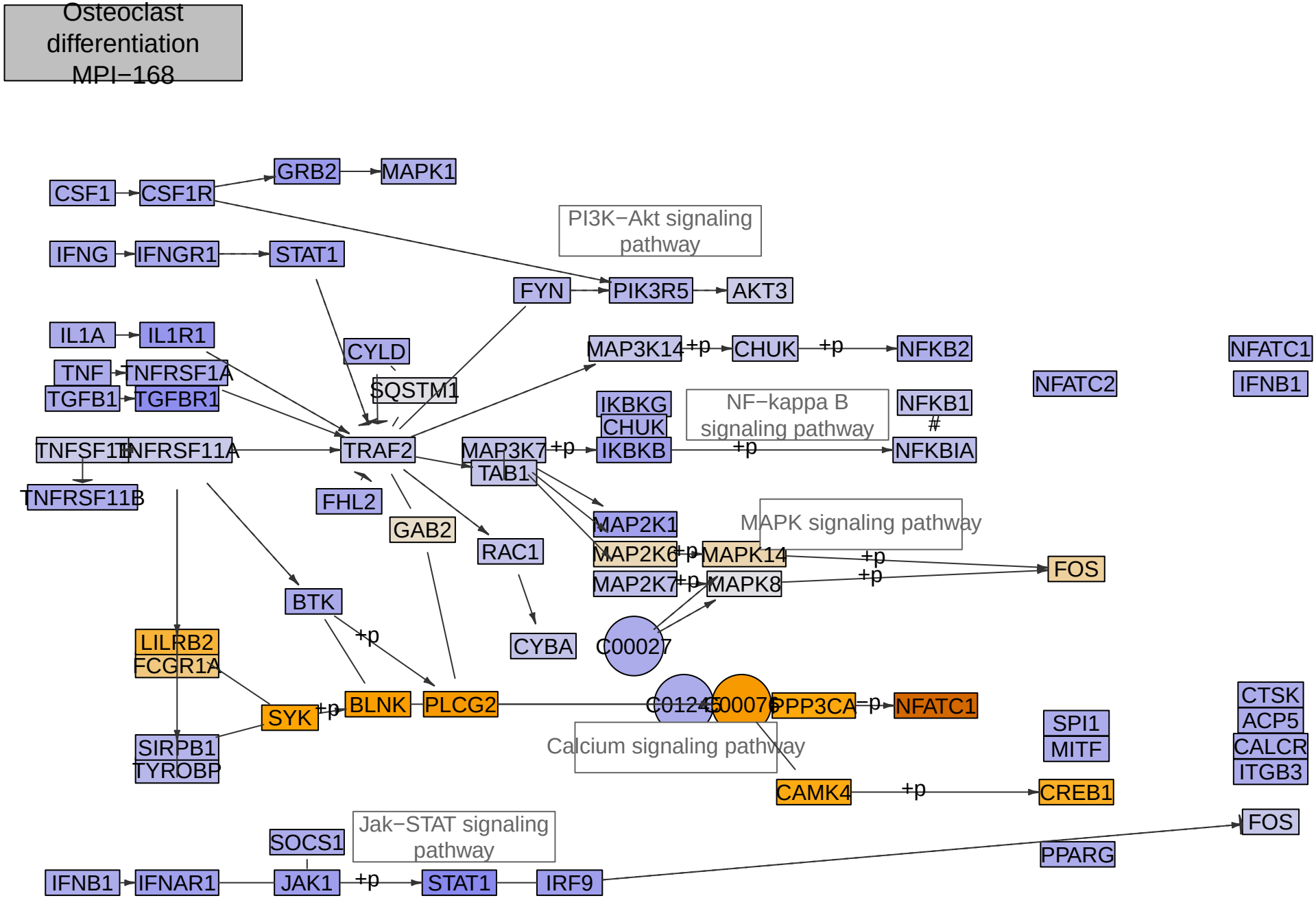
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−168
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PI3K−Akt signaling pathway
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STAT1
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AKT3
IL1A
IL1R1
CYLD
MAP3K14
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+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
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SOCS1
Jak−STAT signaling pathway
FOS
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IFNAR1
JAK1
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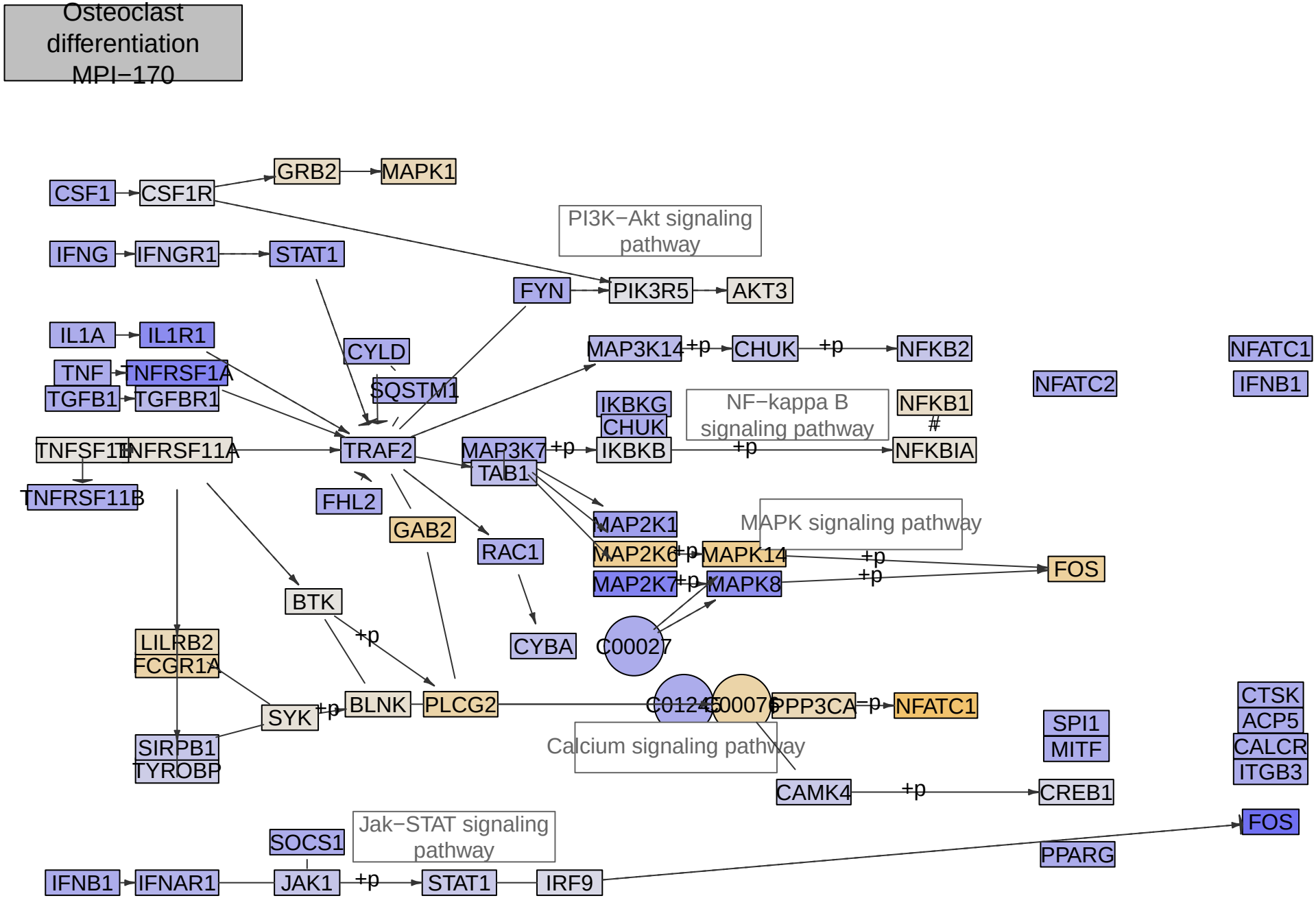
IRF9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FYN
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AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
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TNFRSF1A
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IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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TNFRSF11A
TRAF2
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IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
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+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
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+p
BLNK
PLCG2
C01245
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SPI1
MITF
CTSK
ACP5
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ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
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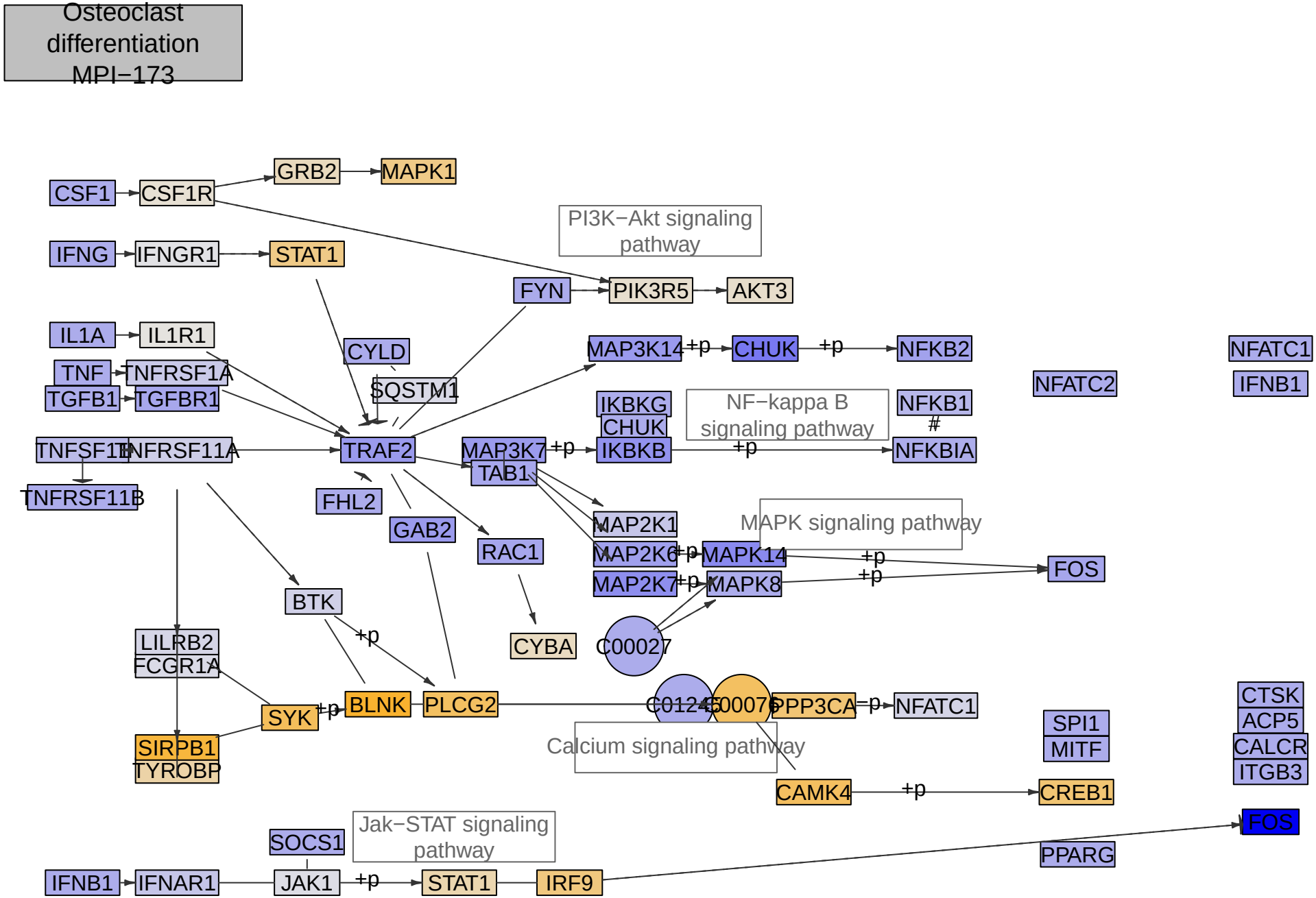
IRF9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FYN
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AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
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BLNK
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CTSK
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TYROBP
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IFNAR1
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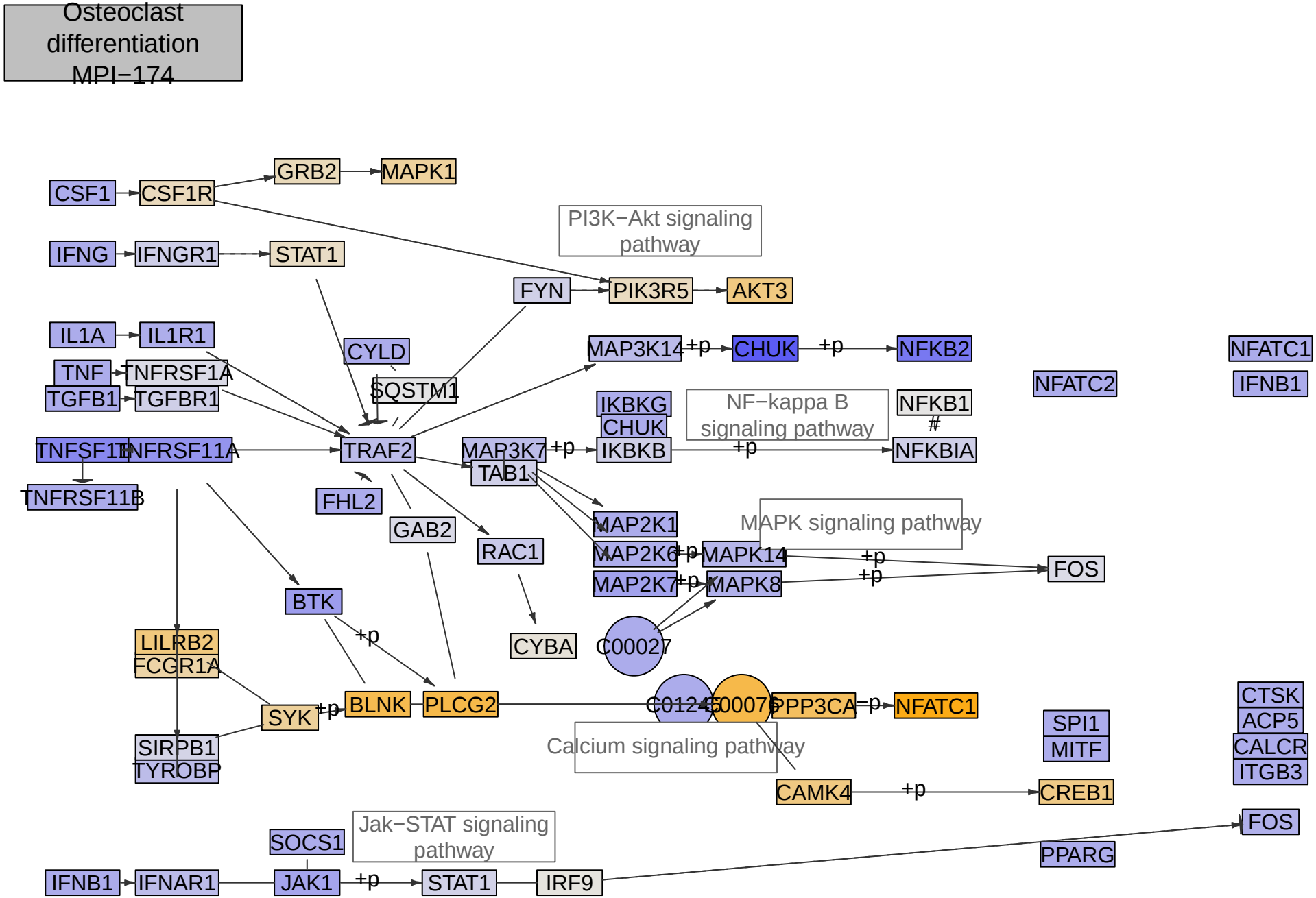
STAT1
IRF9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AKT3
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IL1R1
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MAP3K14
+p
CHUK
+p
NFKB2
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MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
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CYBA
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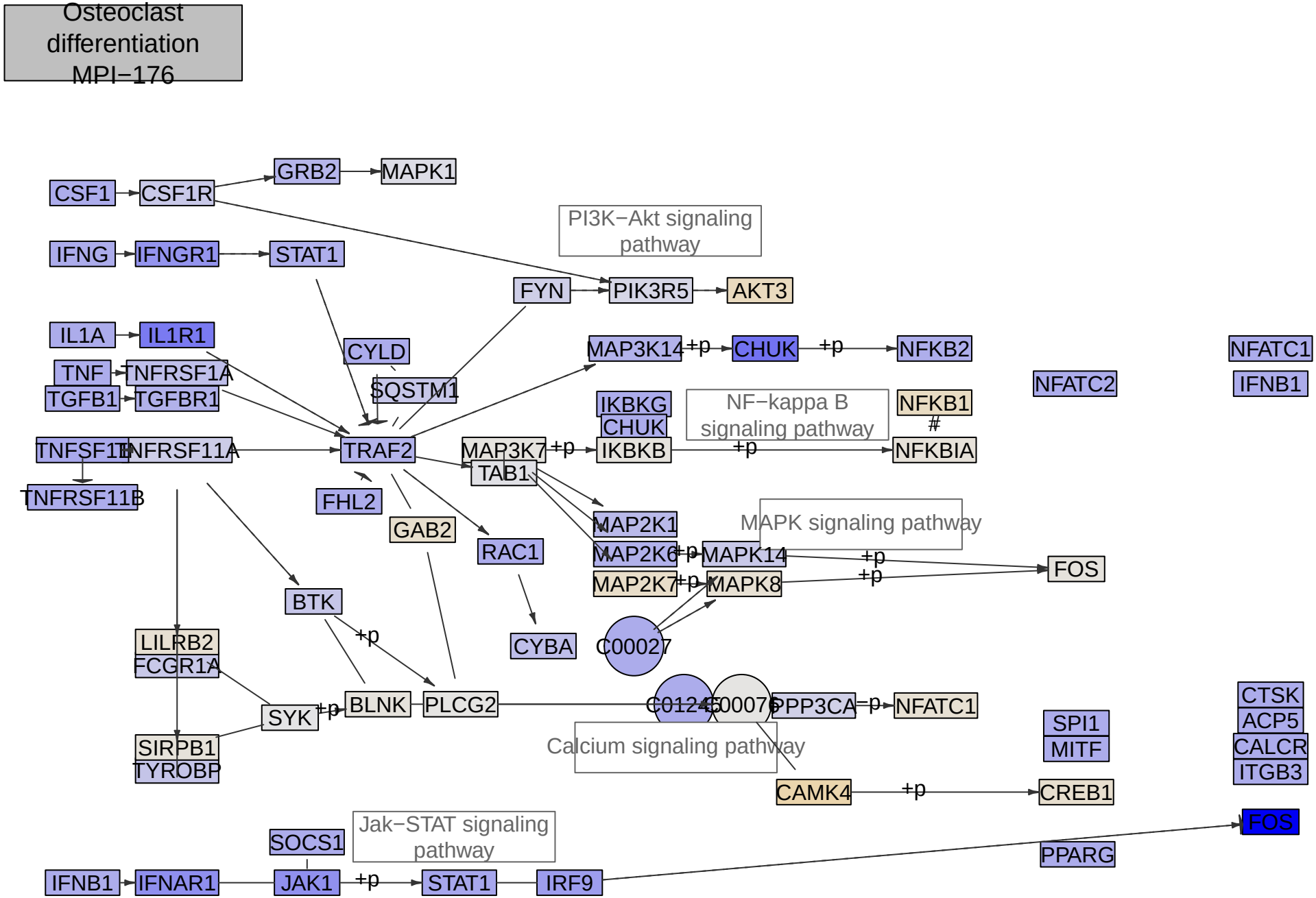
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AKT3
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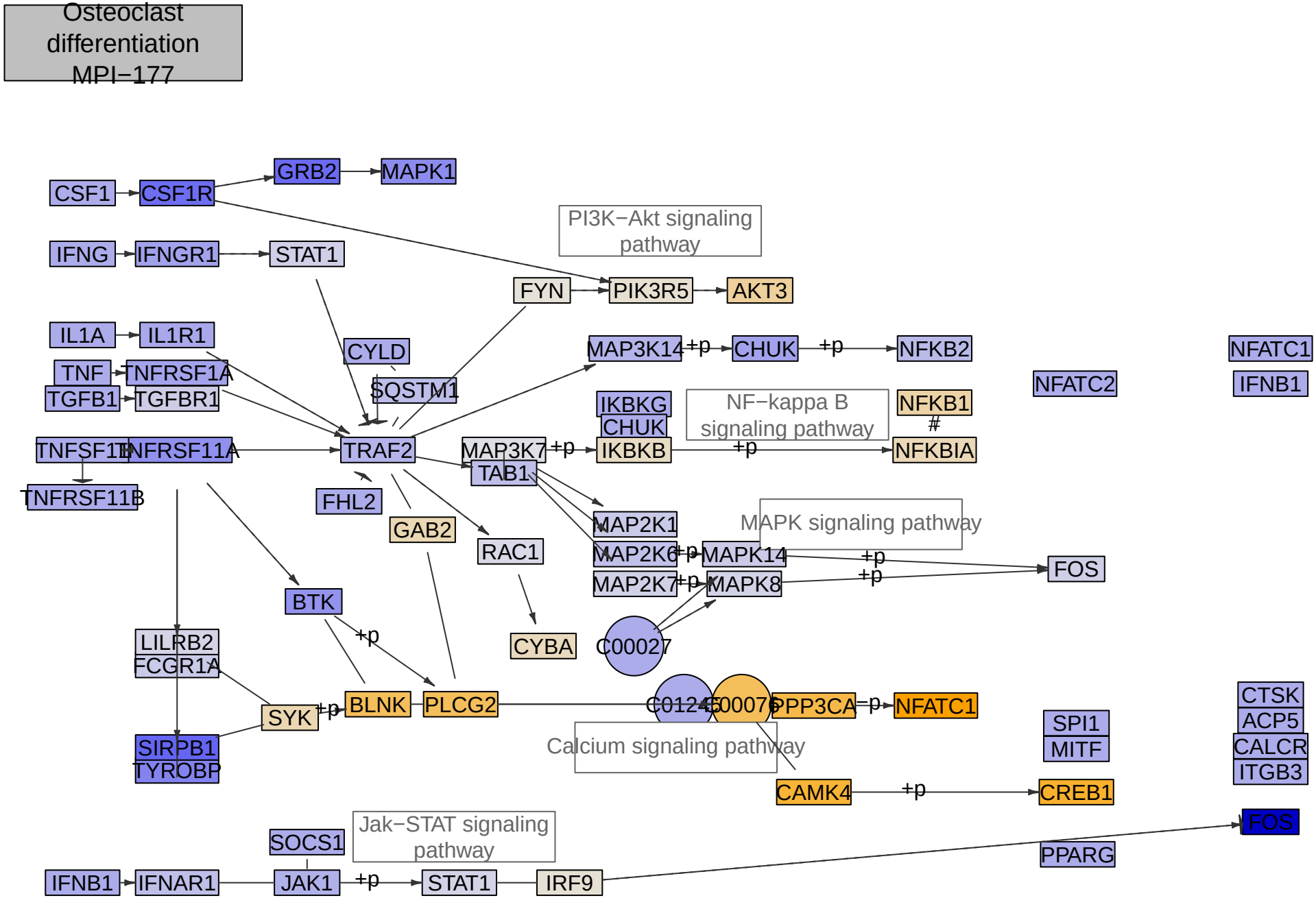
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MAP2K7
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MAPK8
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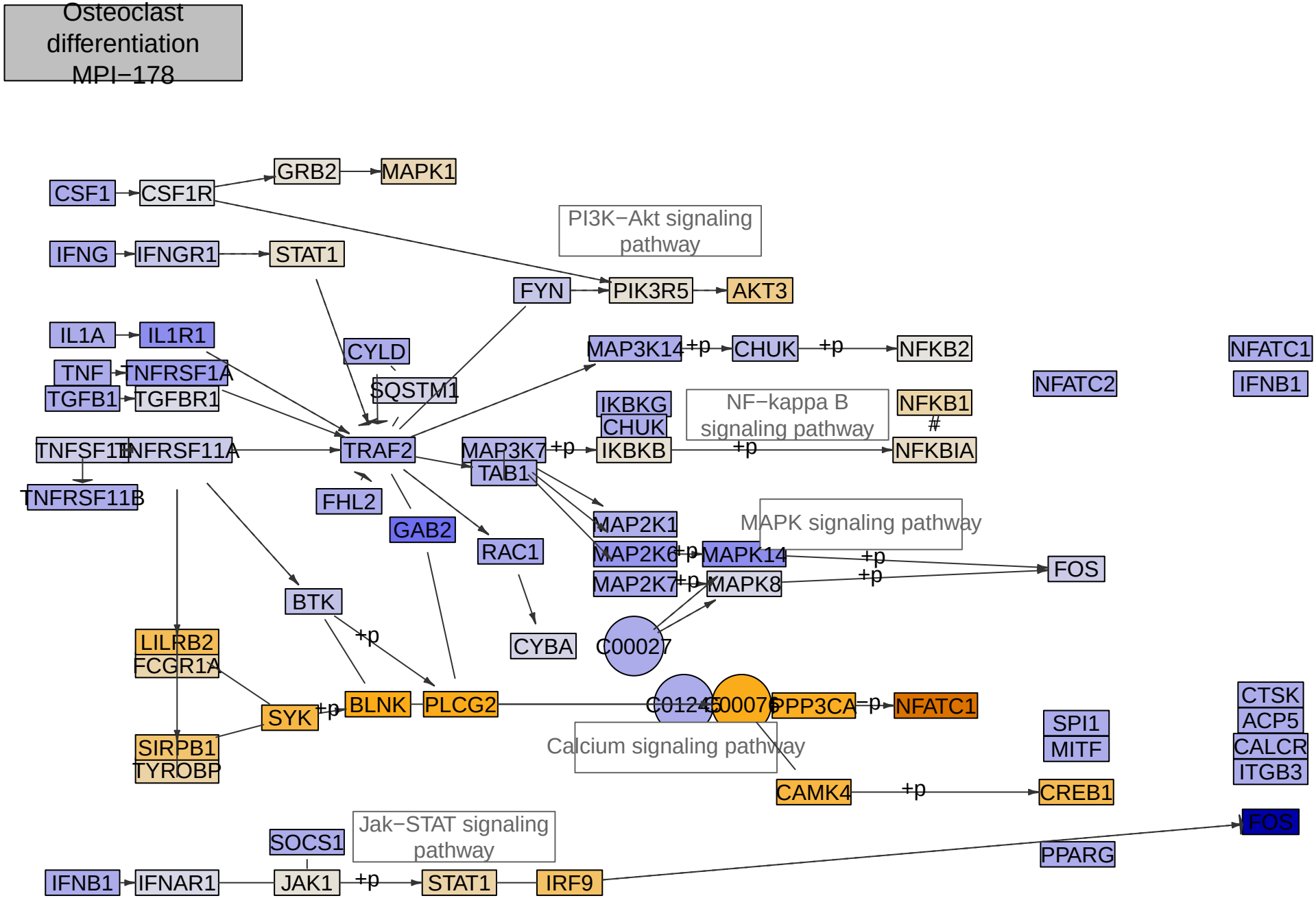
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CHUK
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MAPK14
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MAP2K7
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MAPK8
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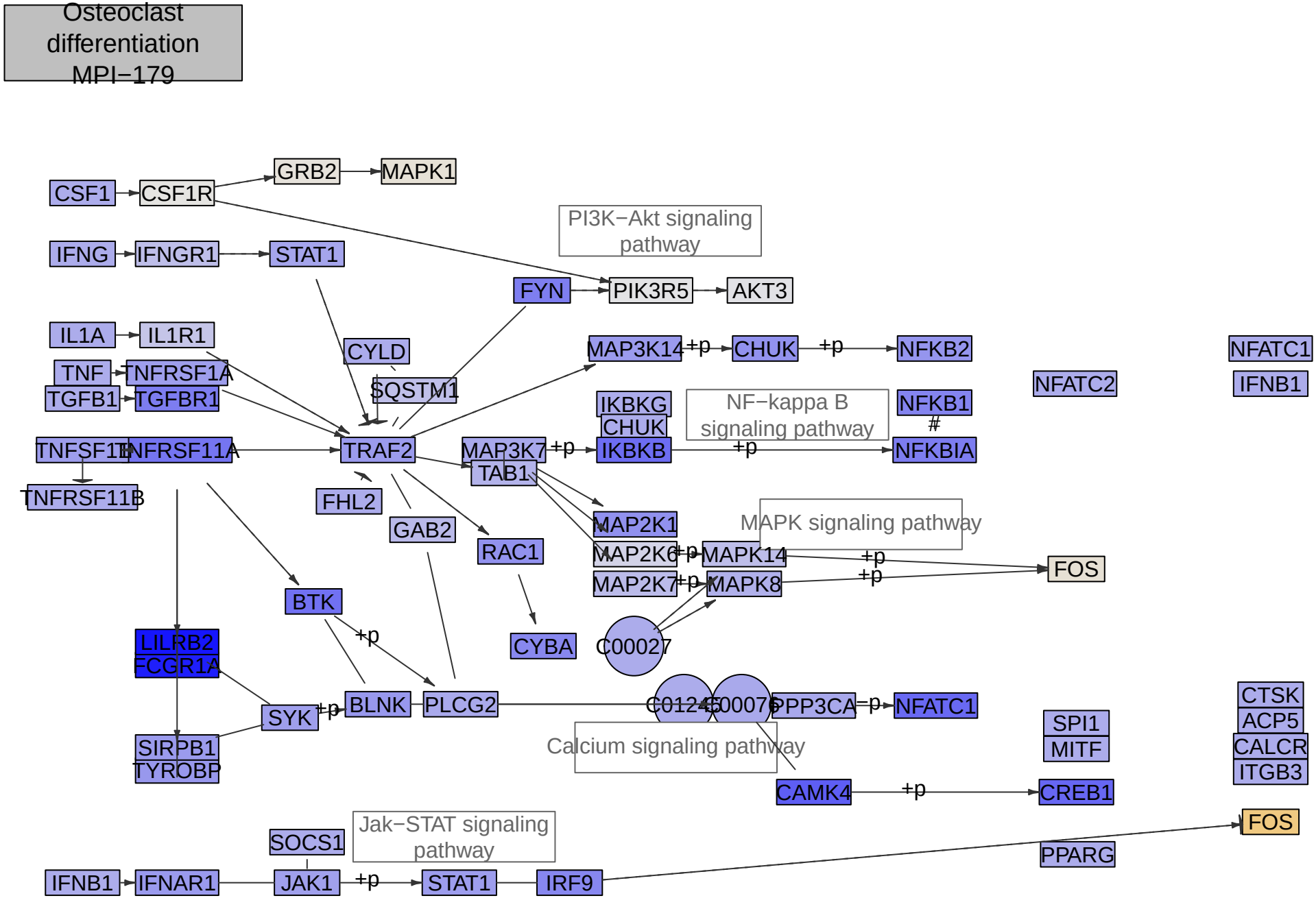
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IL1R1
CYLD
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CHUK
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SQSTM1
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TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
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TRAF2
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IKBKB
+p
NFKBIA
TAB1
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FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
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MAP2K7
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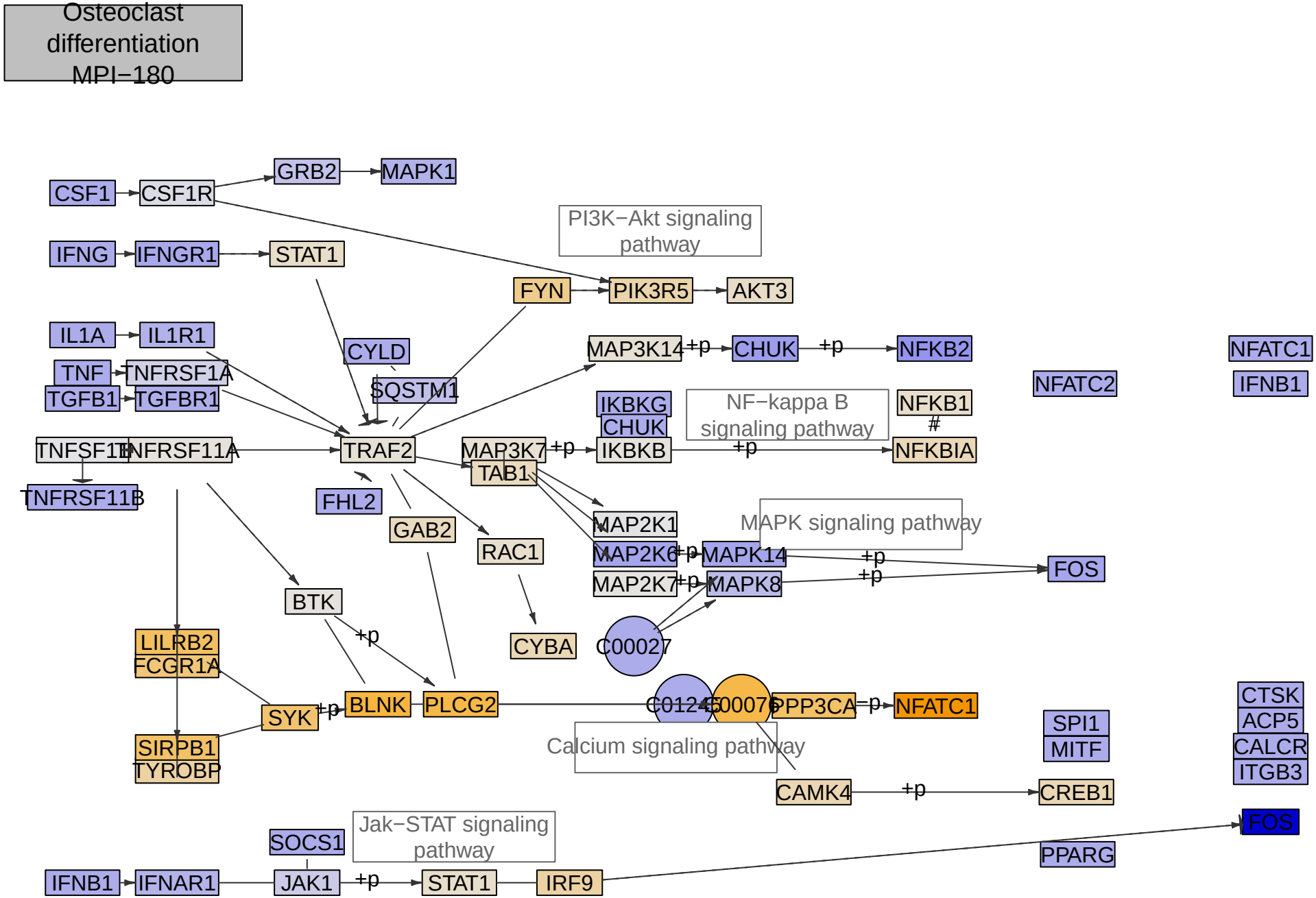
Osteoclast differentiation MPI−180
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NF−kappa B signaling pathway
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RAC1
MAP2K1
MAPK signaling pathway
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MAPK14
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MAP2K7
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MAPK8
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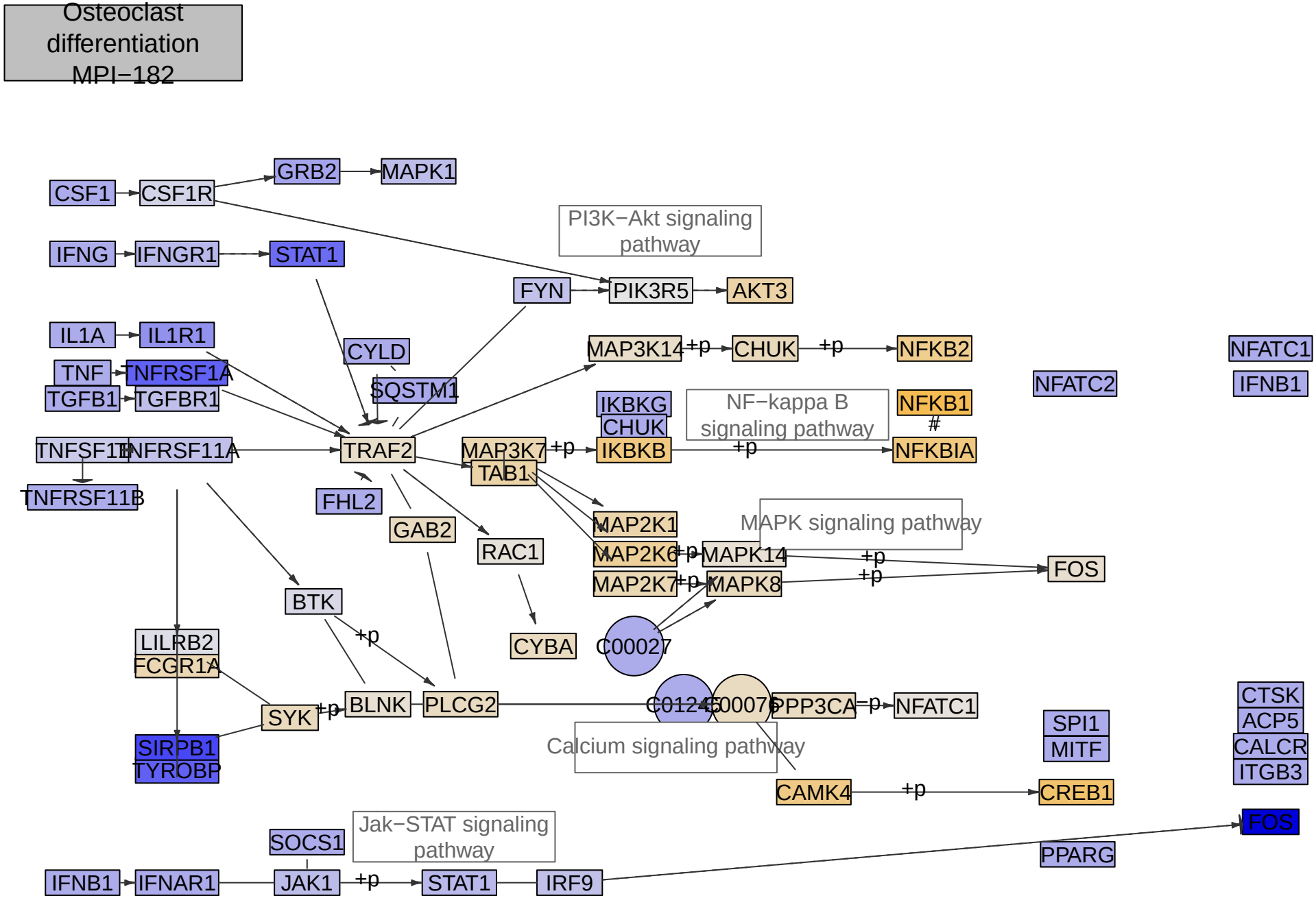
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TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
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IKBKB
+p
NFKBIA
TAB1
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FHL2
GAB2
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MAPK signaling pathway
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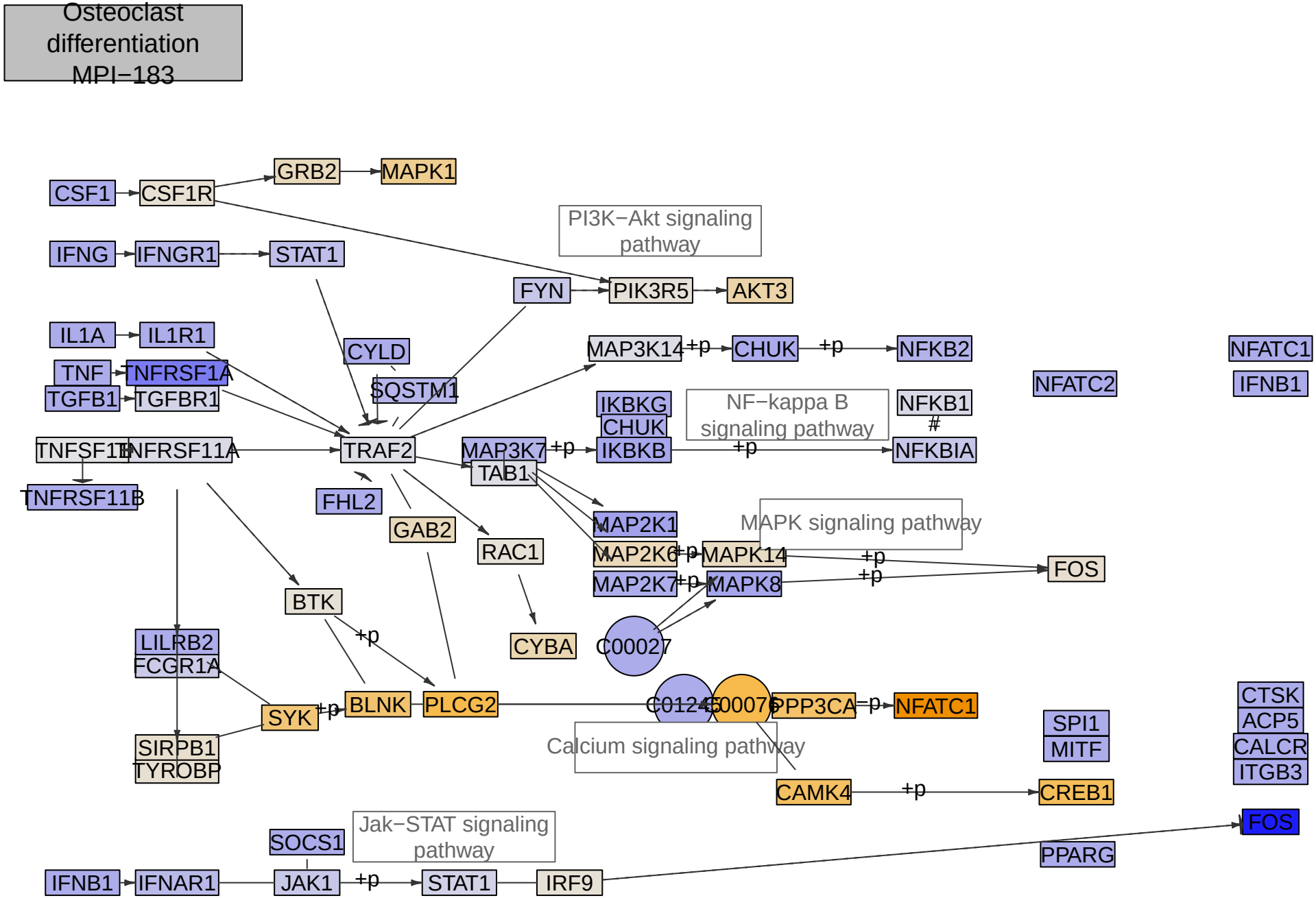
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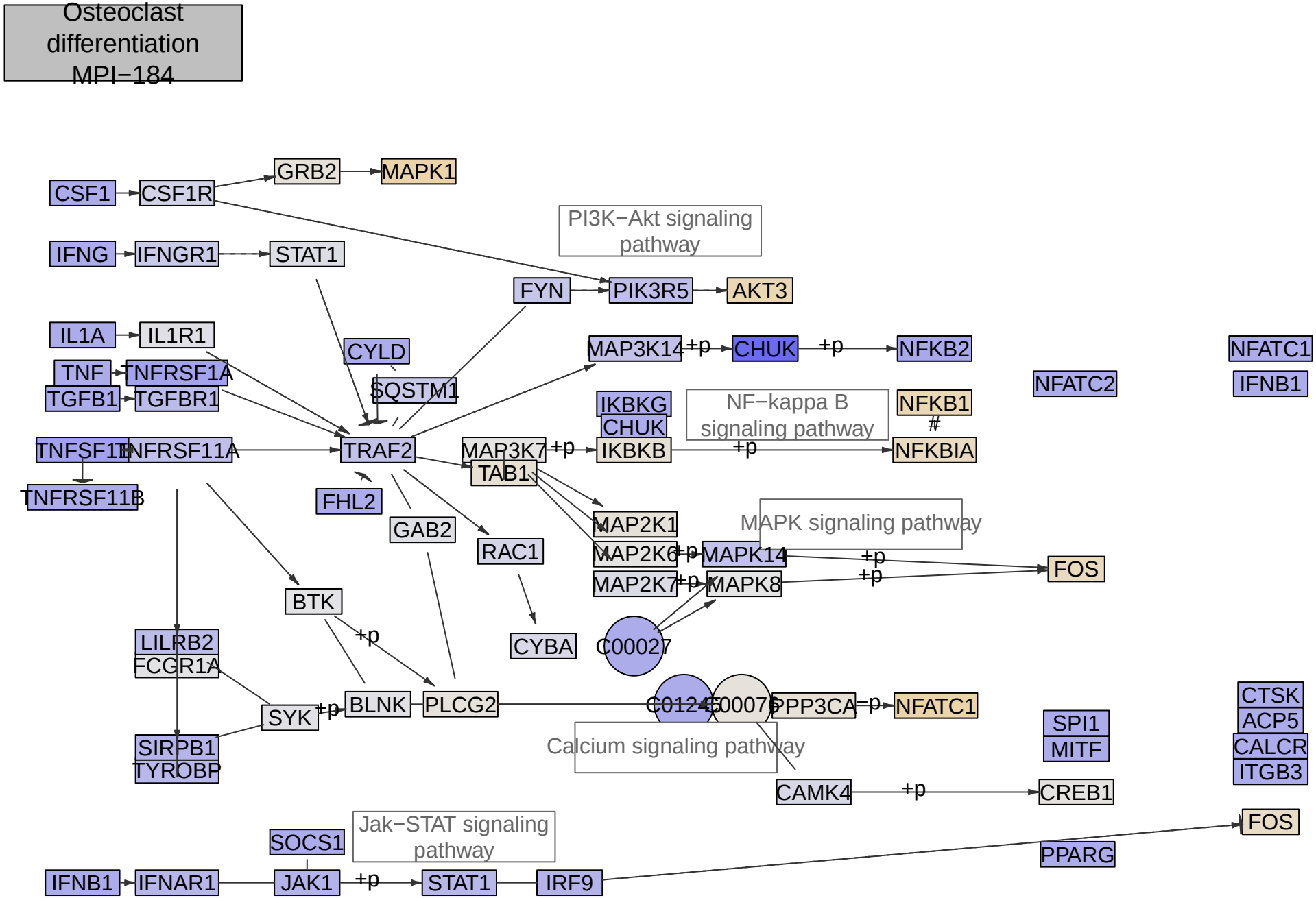
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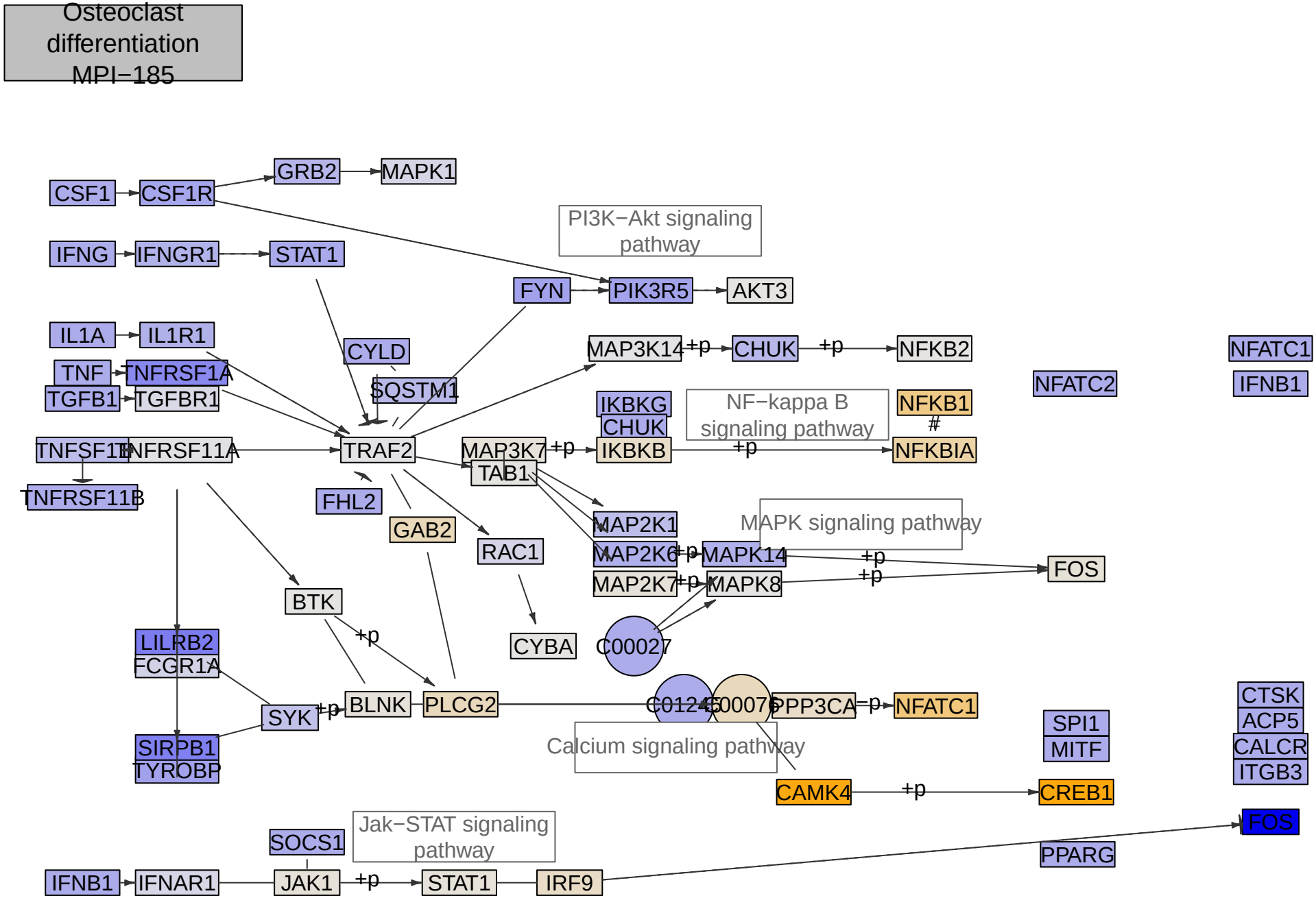
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STAT1
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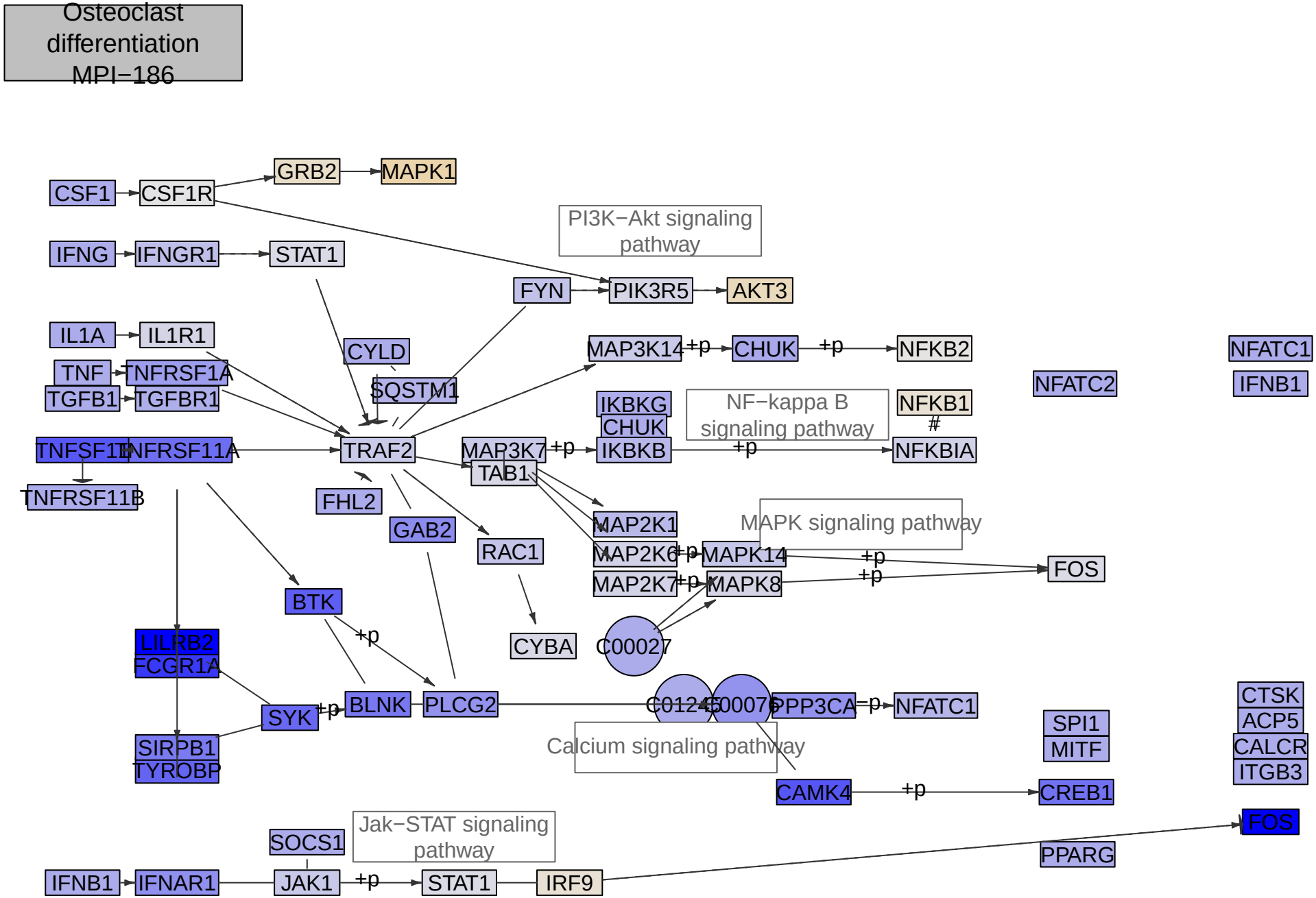
Osteoclast differentiation MPI−186
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CSF1R
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MAPK1
PI3K−Akt signaling pathway
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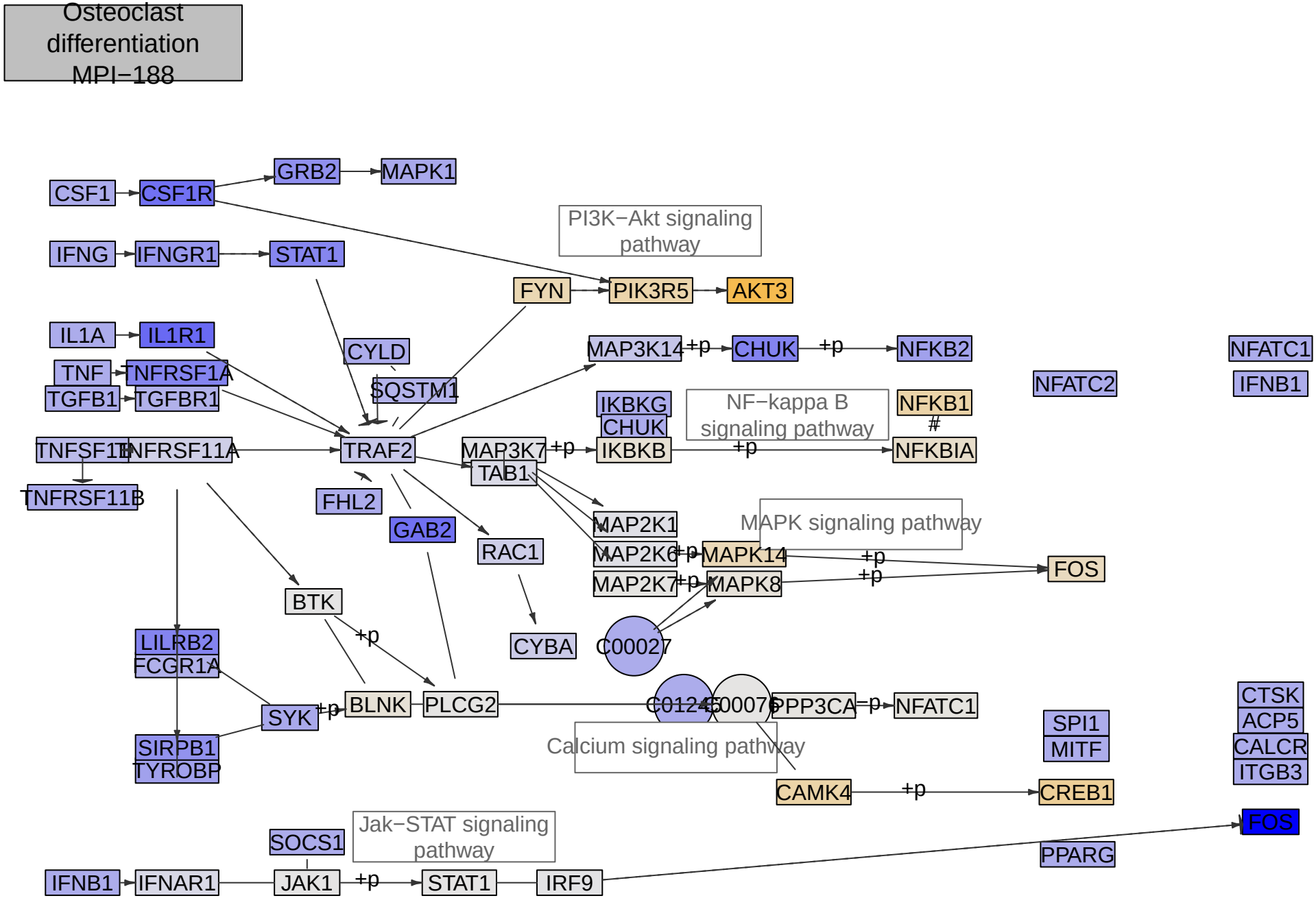
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−188
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CSF1R
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PI3K−Akt signaling pathway
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STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
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IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFSF11
TNFRSF11A
TRAF2
MAP3K7
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IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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CREB1
FOS
SOCS1
Jak−STAT signaling pathway
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IFNB1
IFNAR1
JAK1
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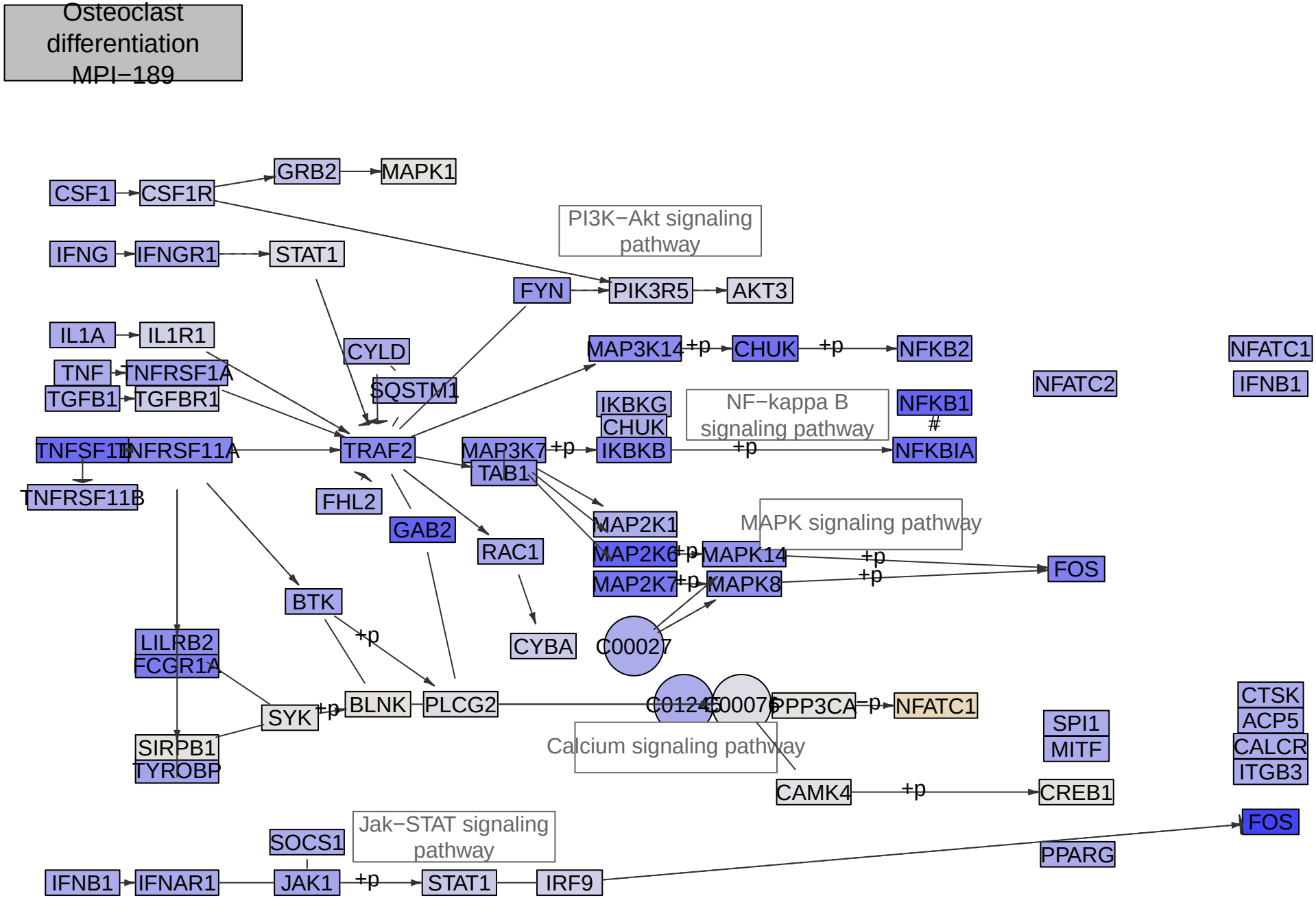
STAT1
IRF9


Osteoclast differentiation MPI−189
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PI3K−Akt signaling pathway
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STAT1
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AKT3
IL1A
IL1R1
CYLD
MAP3K14
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CHUK
+p
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NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
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SYK
+p
BLNK
PLCG2
C01245
C00076
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+p
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SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
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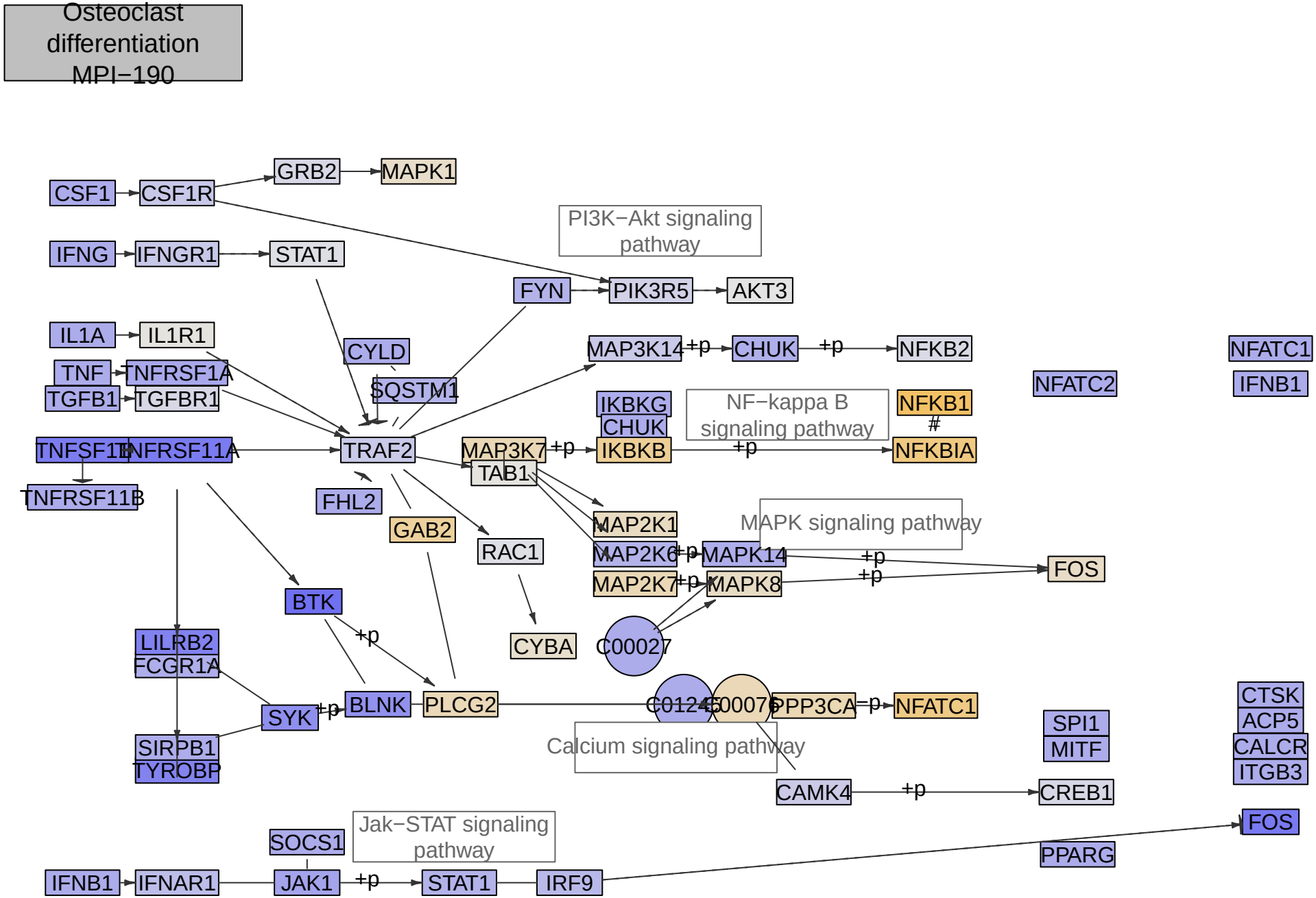
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−190
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CSF1R
PI3K−Akt signaling pathway
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IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
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C00027
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BLNK
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SIRPB1
TYROBP
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ACP5
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IFNAR1
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STAT1
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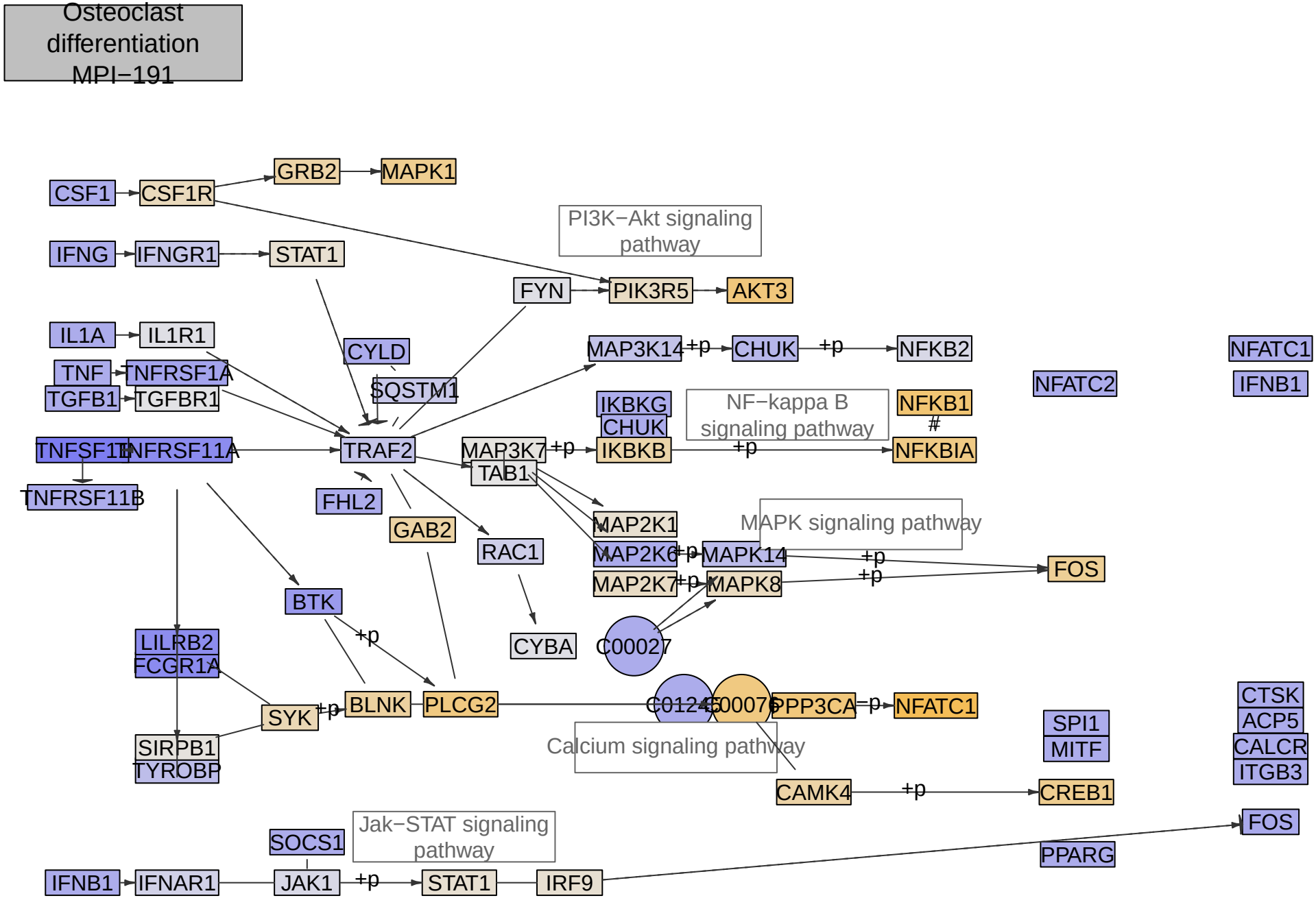
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STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
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SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
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TYROBP
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IFNAR1
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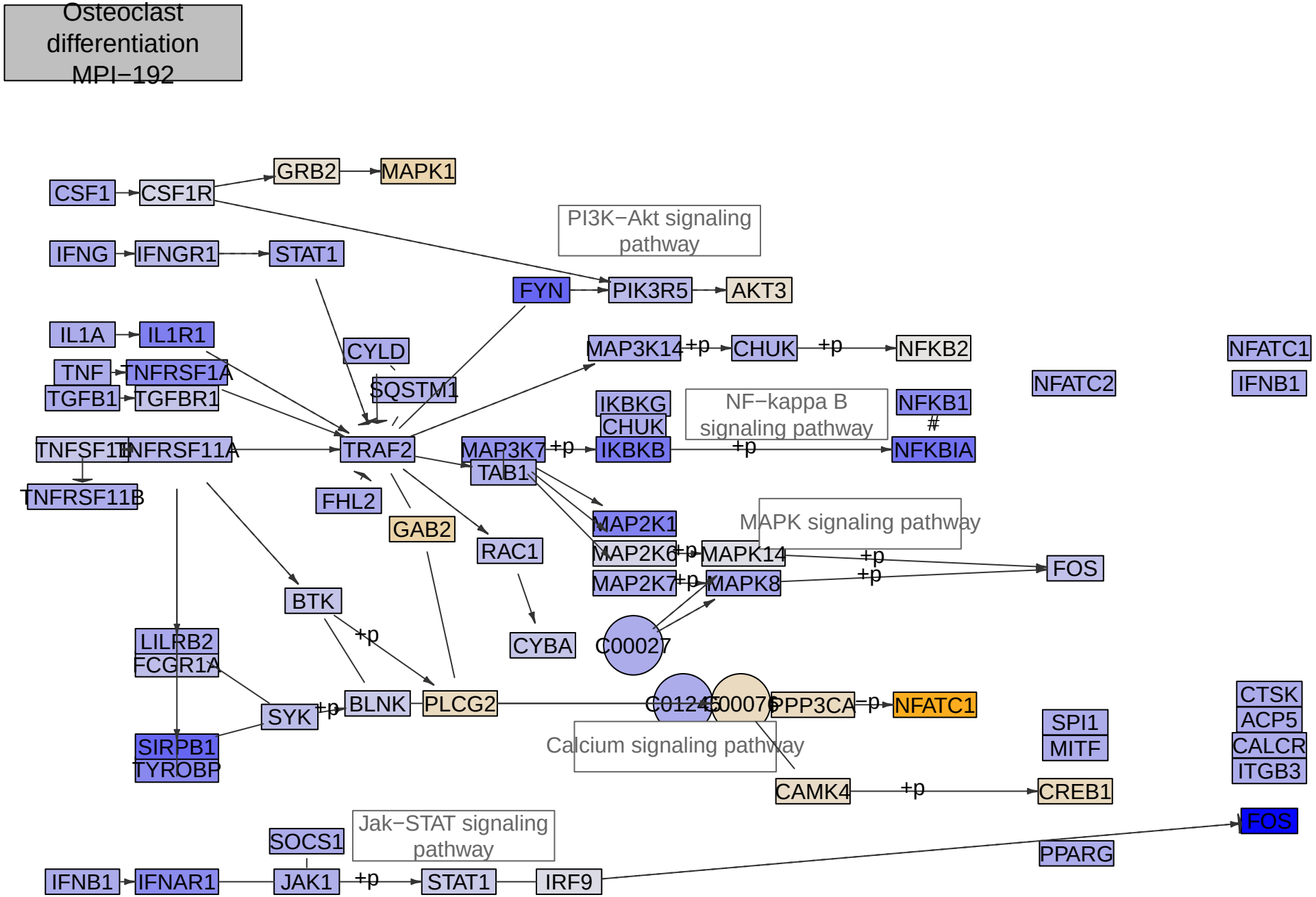
Osteoclast differentiation MPI−192
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AKT3
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IL1R1
CYLD
MAP3K14
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CHUK
+p
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TNF
TNFRSF1A
SQSTM1
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IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
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IKBKB
+p
NFKBIA
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GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
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MAPK14
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FOS
MAP2K7
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MAPK8
+p
BTK
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CYBA
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IFNAR1
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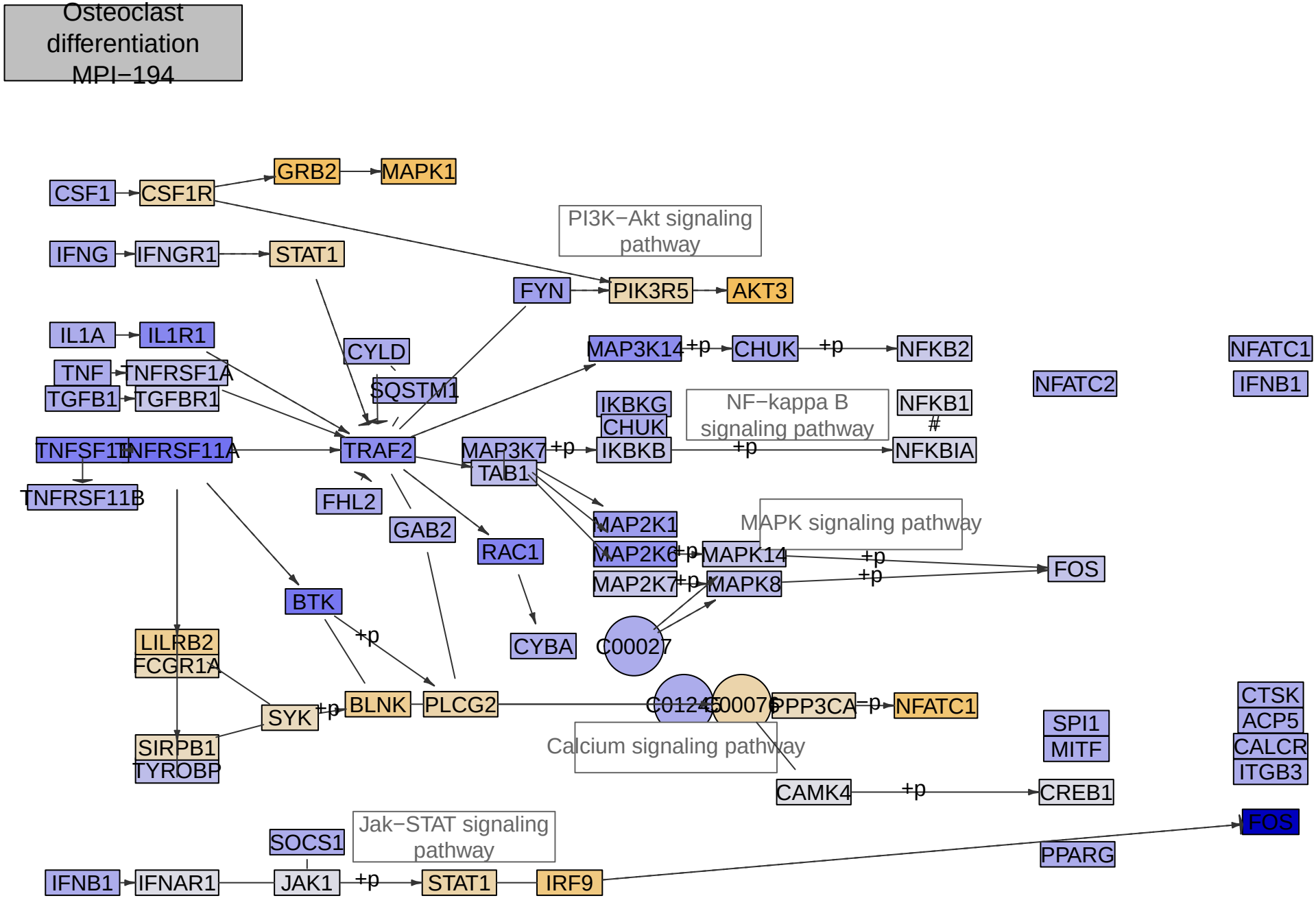
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PIK3R5
AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
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TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
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+p
NFKBIA
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FHL2
GAB2
MAP2K1
MAPK signaling pathway
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MAPK14
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FOS
MAP2K7
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MAPK8
+p
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FCGR1A
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CYBA
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IFNAR1
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STAT1
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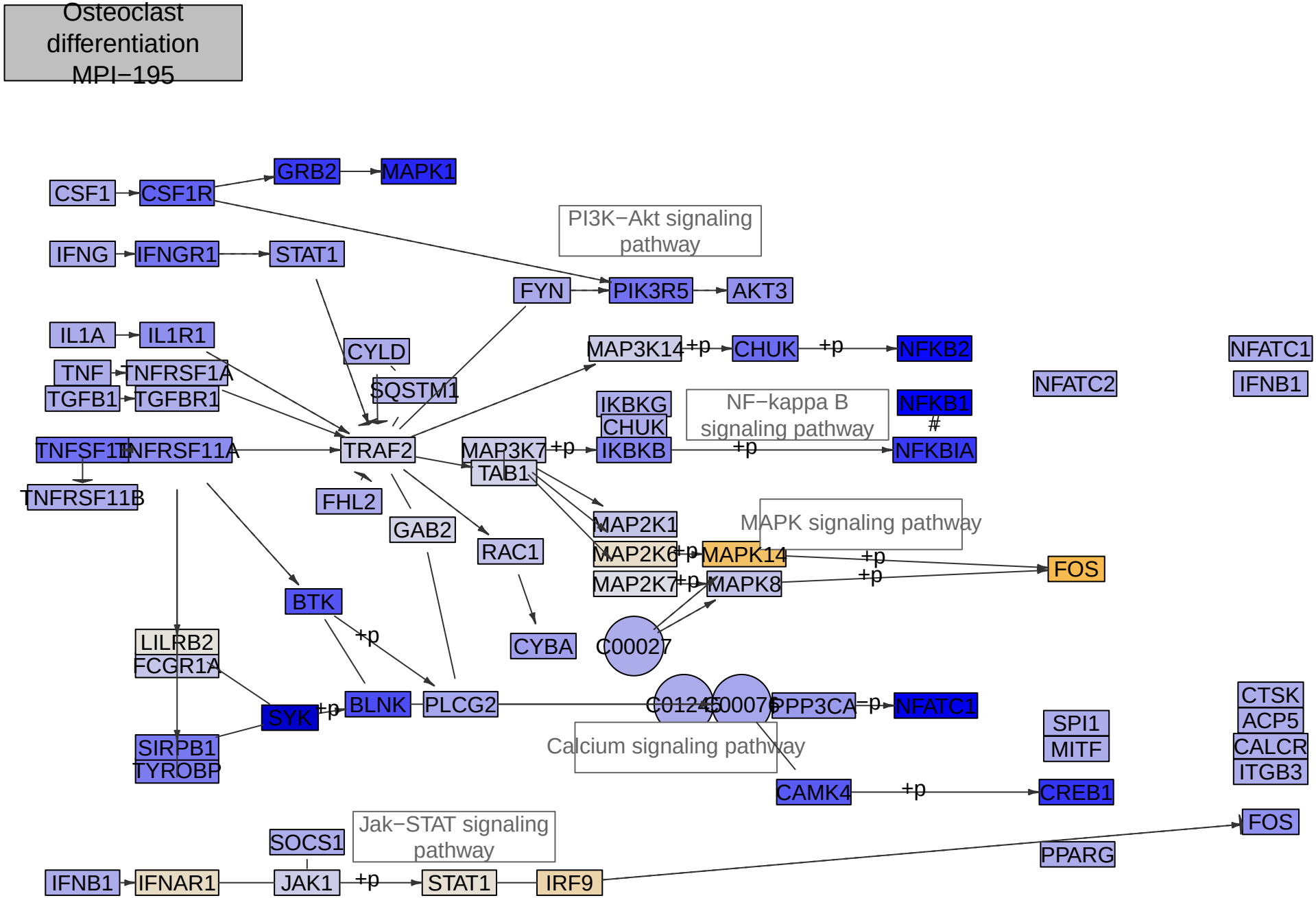
Osteoclast differentiation MPI−195
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IL1R1
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CHUK
+p
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TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TAB1
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FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
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MAP2K7
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MAPK8
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BTK
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TYROBP
Calcium signaling pathway
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Jak−STAT signaling pathway
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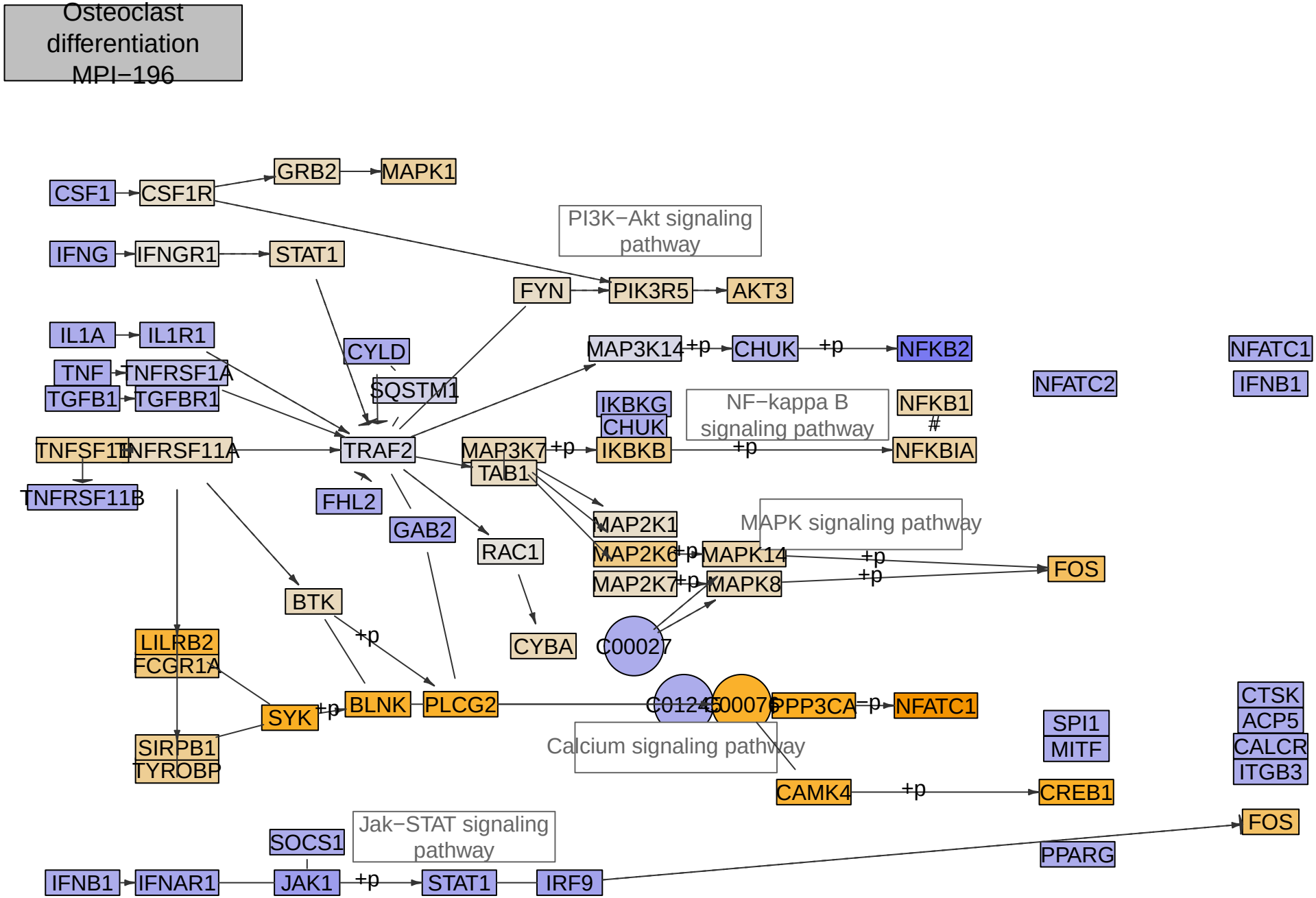
Osteoclast differentiation MPI−196
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CYLD
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CHUK
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NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
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BLNK
PLCG2
C01245
C00076
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CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
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CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
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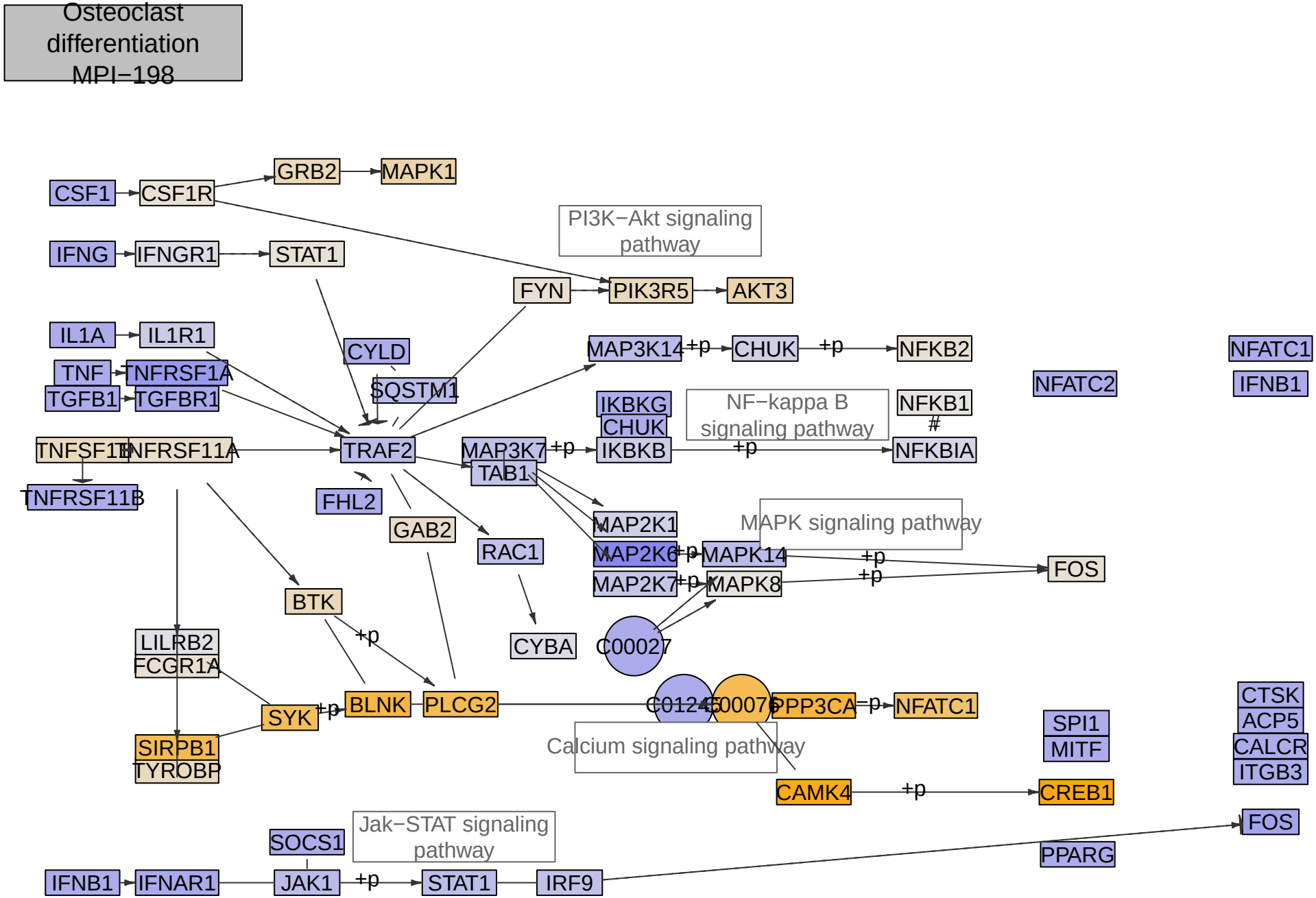
+p
STAT1
IRF9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IL1R1
CYLD
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CHUK
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NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
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BLNK
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MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
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Jak−STAT signaling pathway
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IFNAR1
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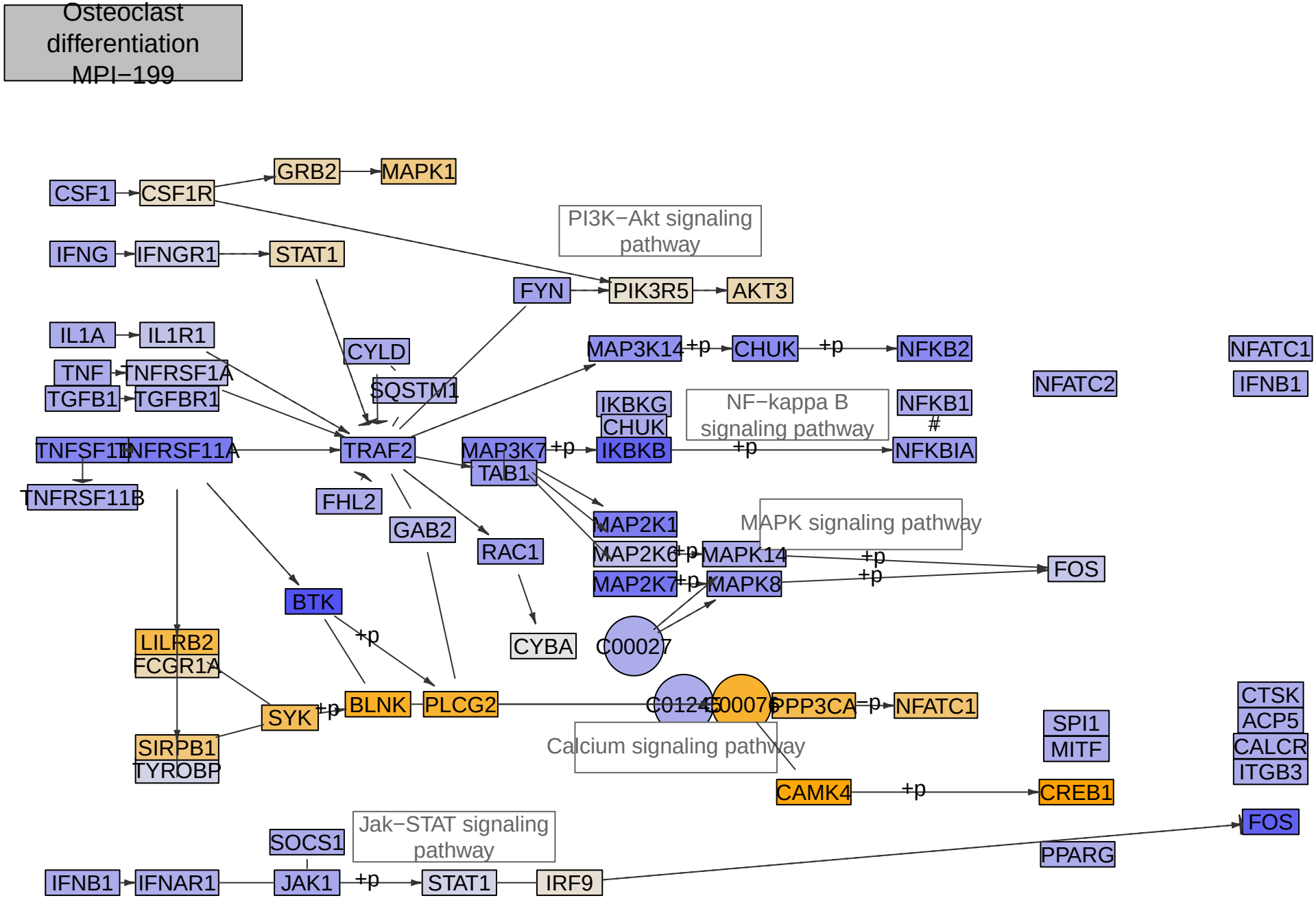
STAT1
IRF9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NFATC1
TNF
TNFRSF1A
SQSTM1
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IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
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MAP2K6
+p
MAPK14
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MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
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CYBA
C00027
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BLNK
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CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
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ITGB3
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SOCS1
Jak−STAT signaling pathway
PPARG
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IFNAR1
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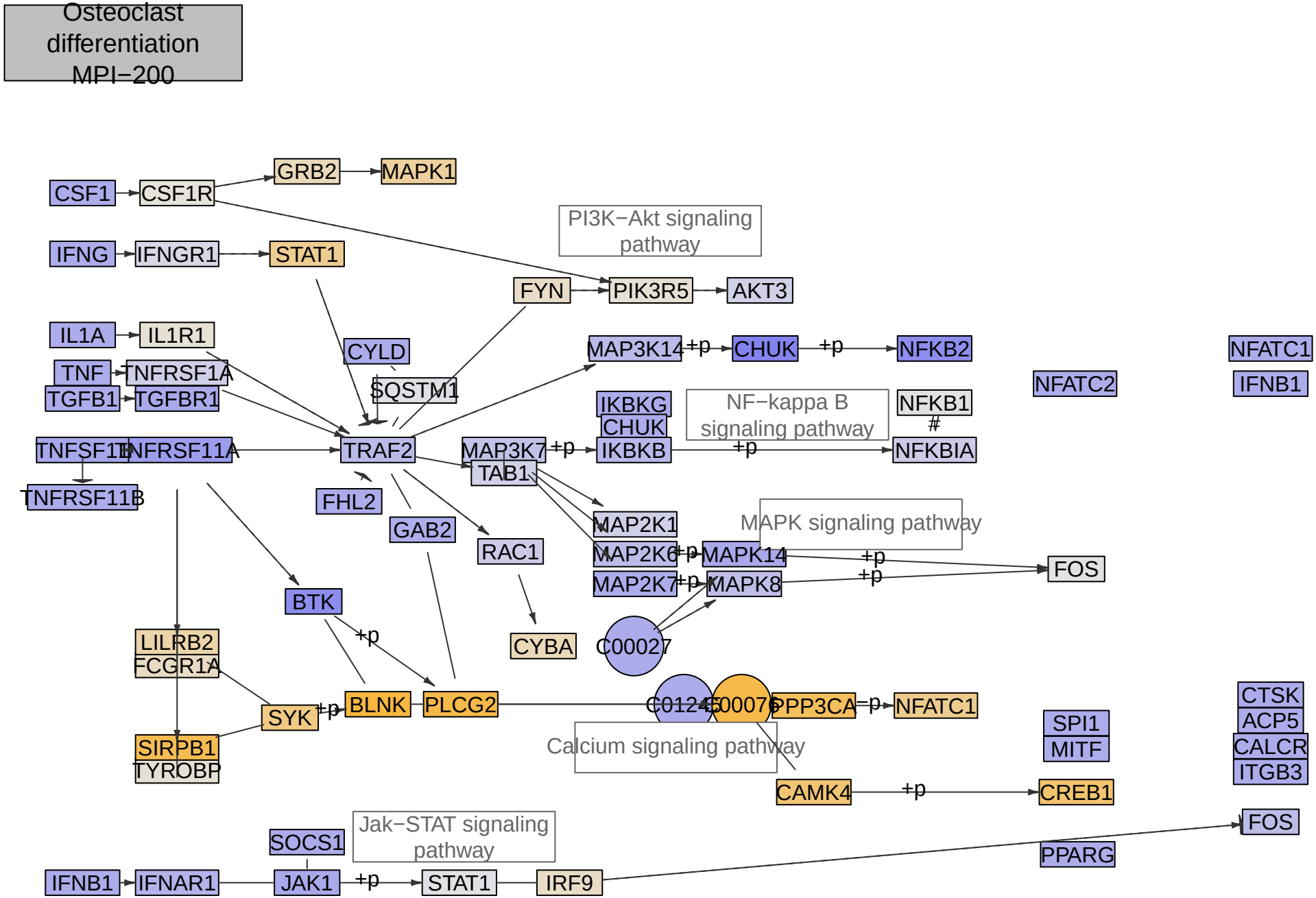
IRF9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CYLD
MAP3K14
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CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
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CYBA
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TYROBP
Calcium signaling pathway
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IFNAR1
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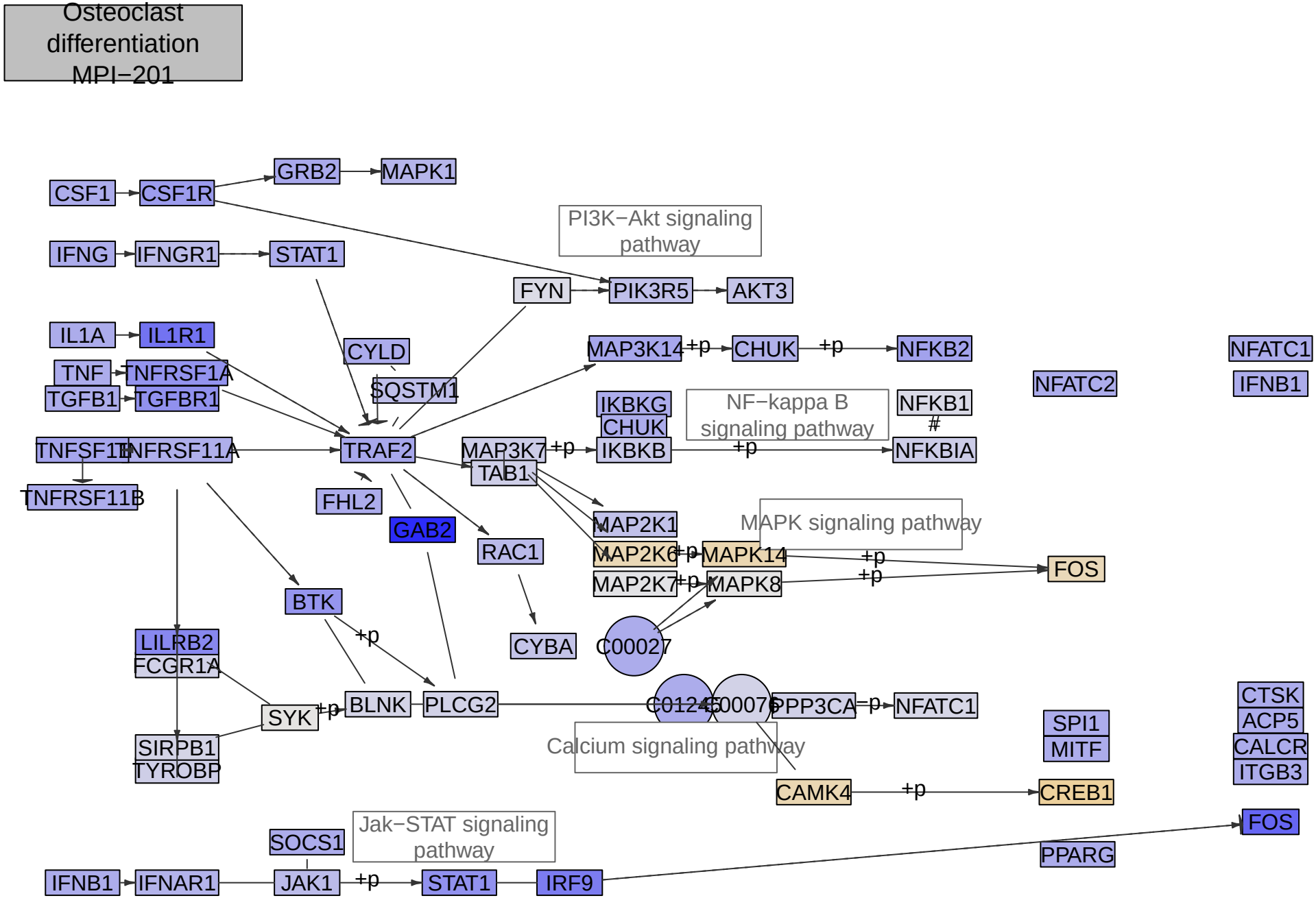
IRF9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CYLD
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CHUK
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NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
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SPI1
MITF
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ITGB3
SIRPB1
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Calcium signaling pathway
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Jak−STAT signaling pathway
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IFNAR1
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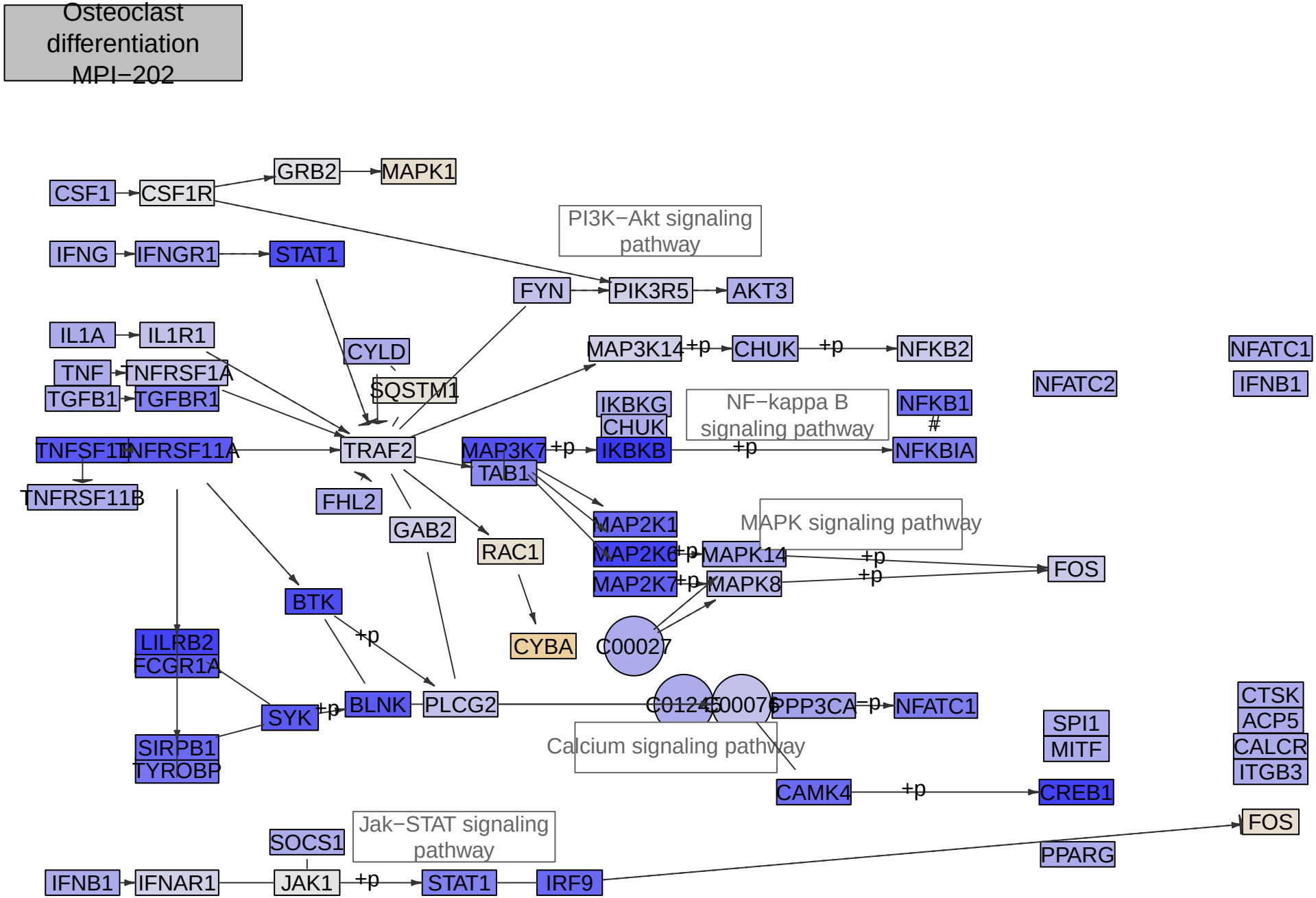
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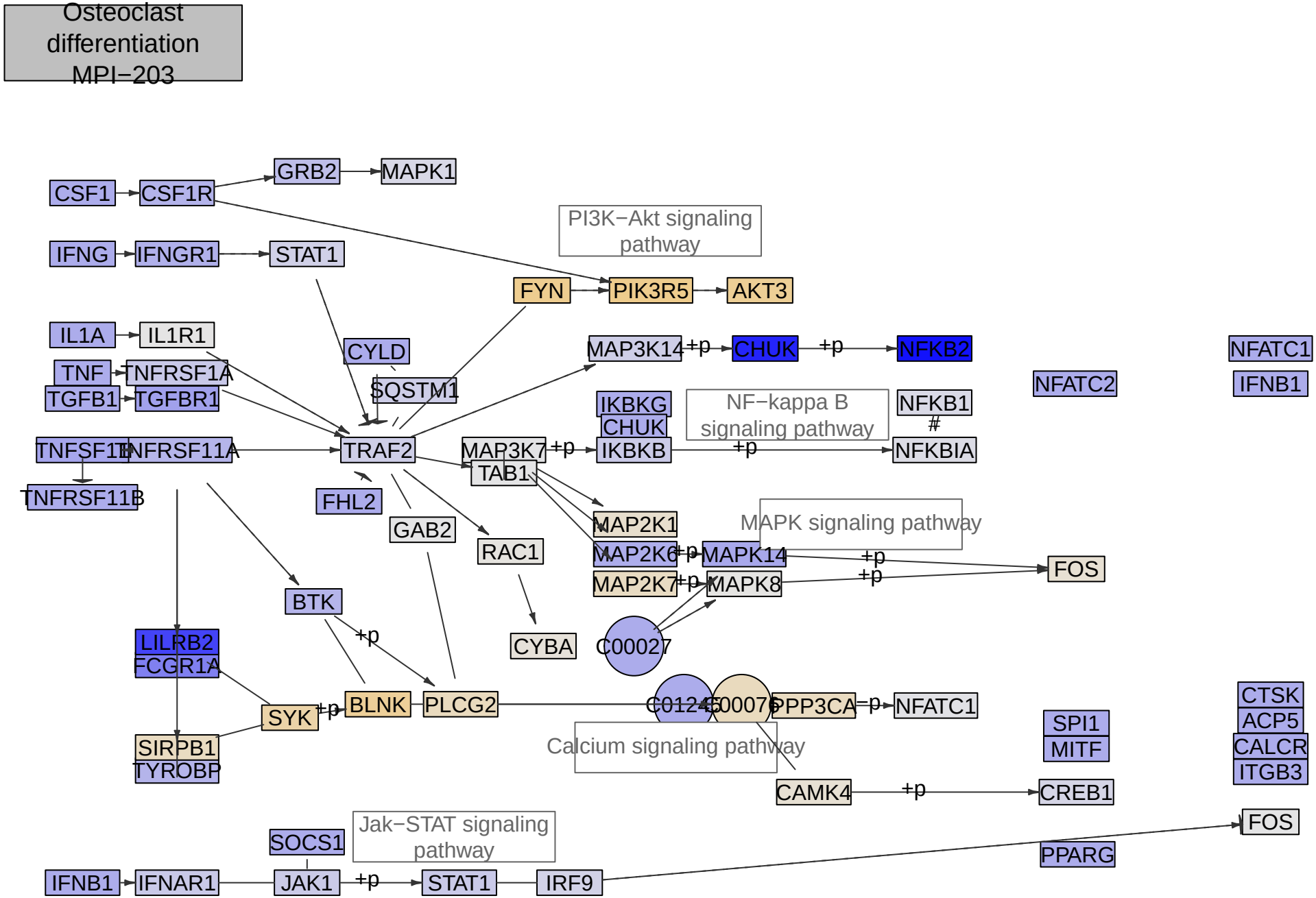
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9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MAPK1
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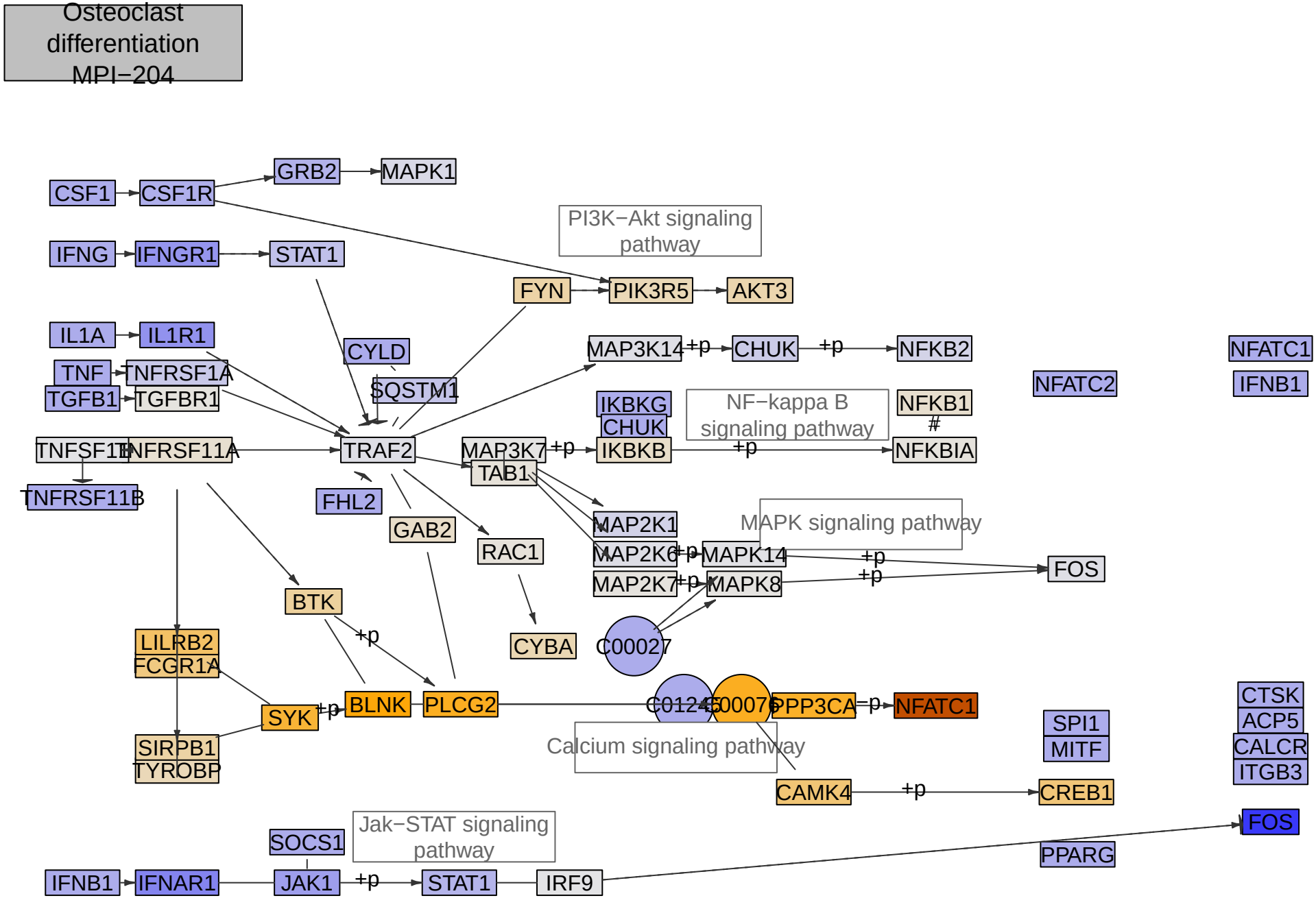
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−204
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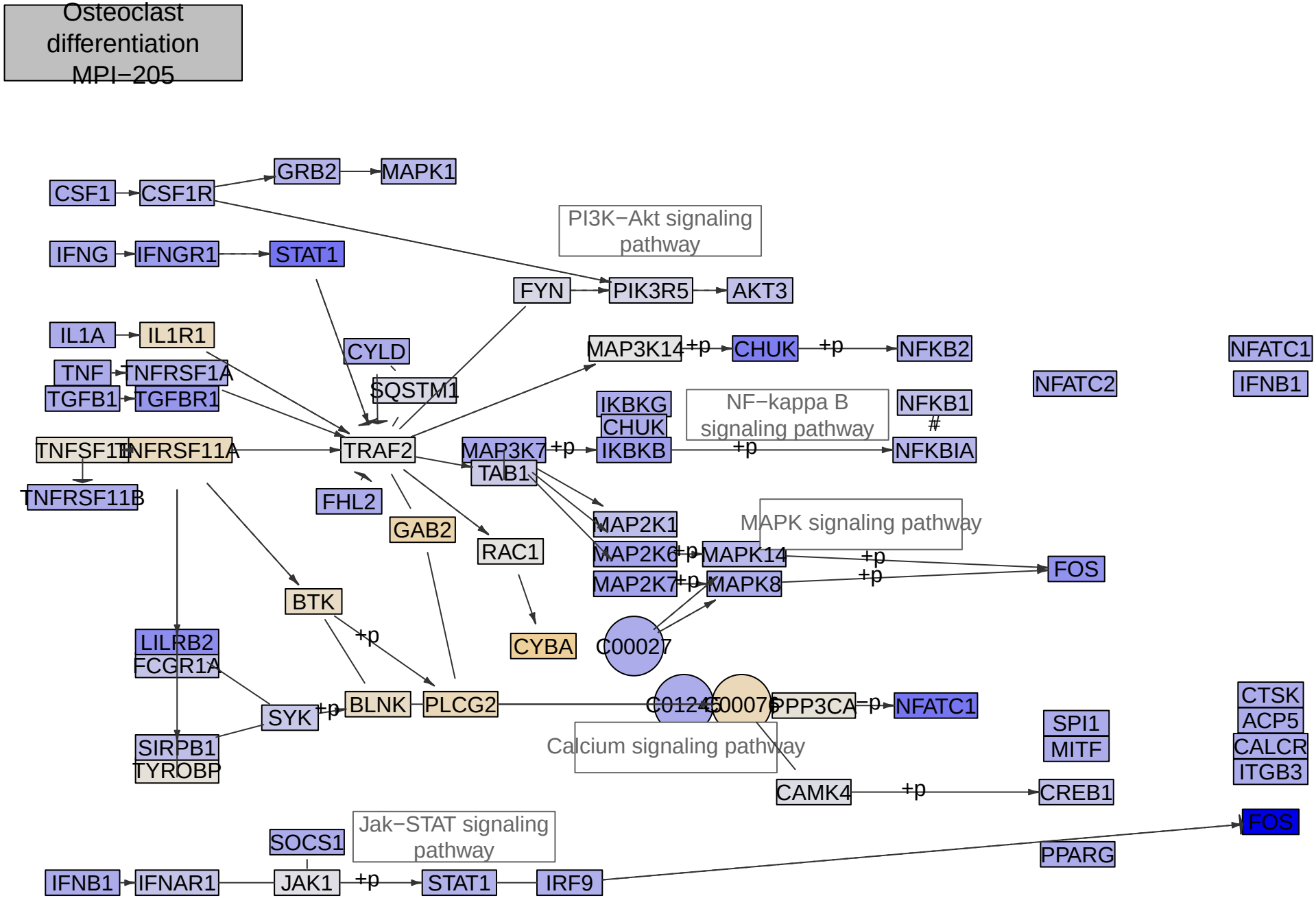
MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−205
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MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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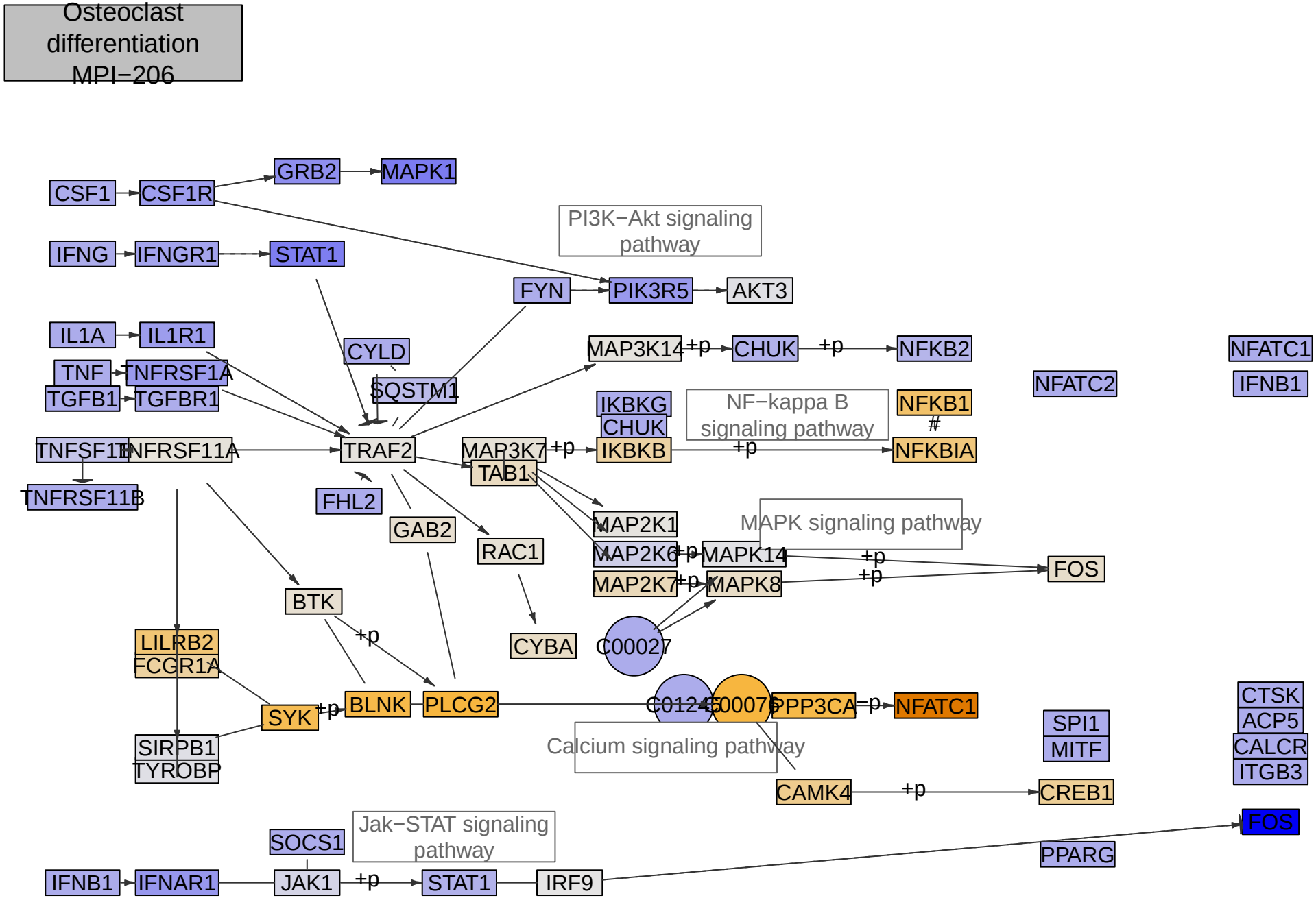
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9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MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
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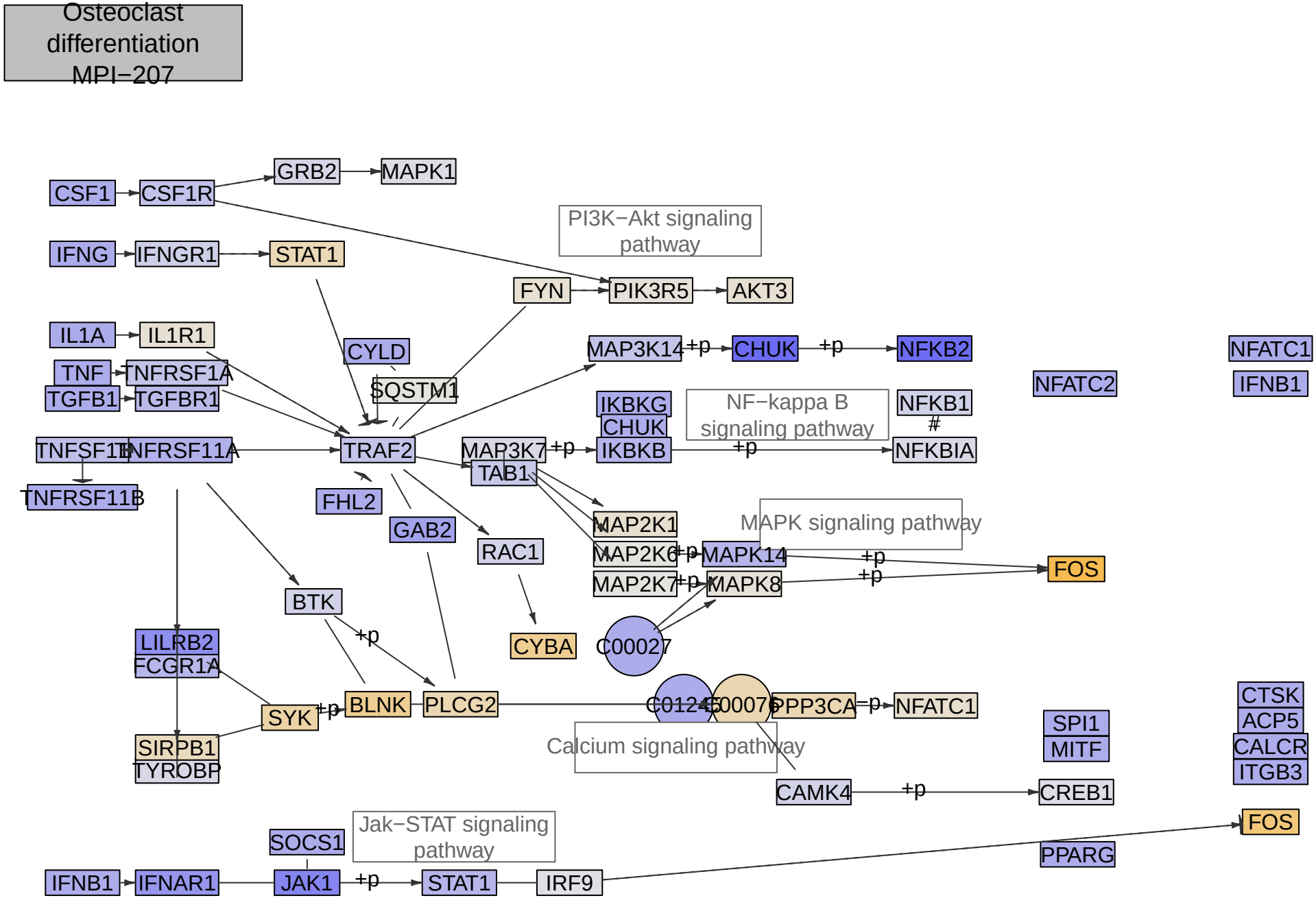
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−207
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CSF1R
GRB2
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PI3K−Akt signaling pathway
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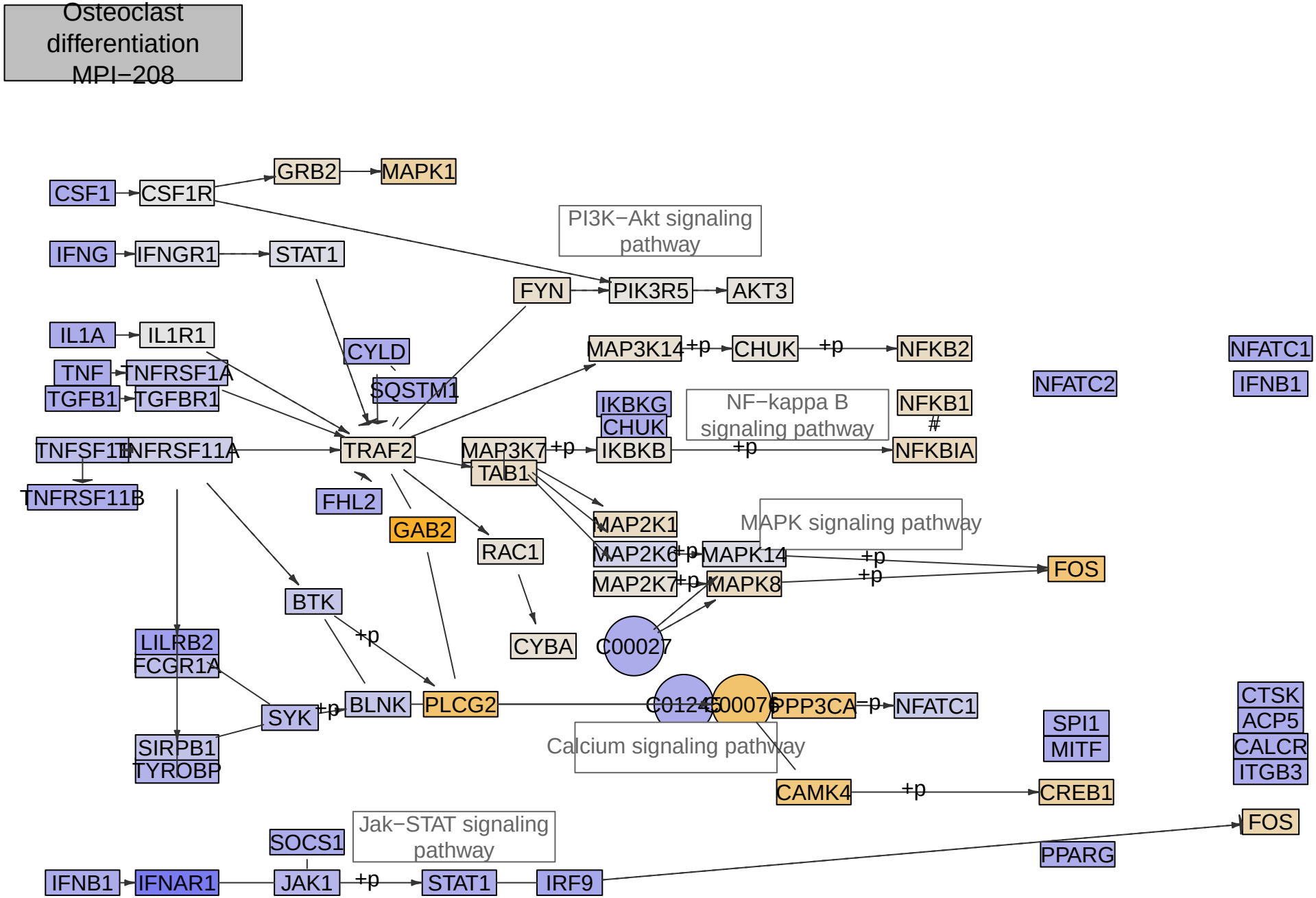
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
=p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9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IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
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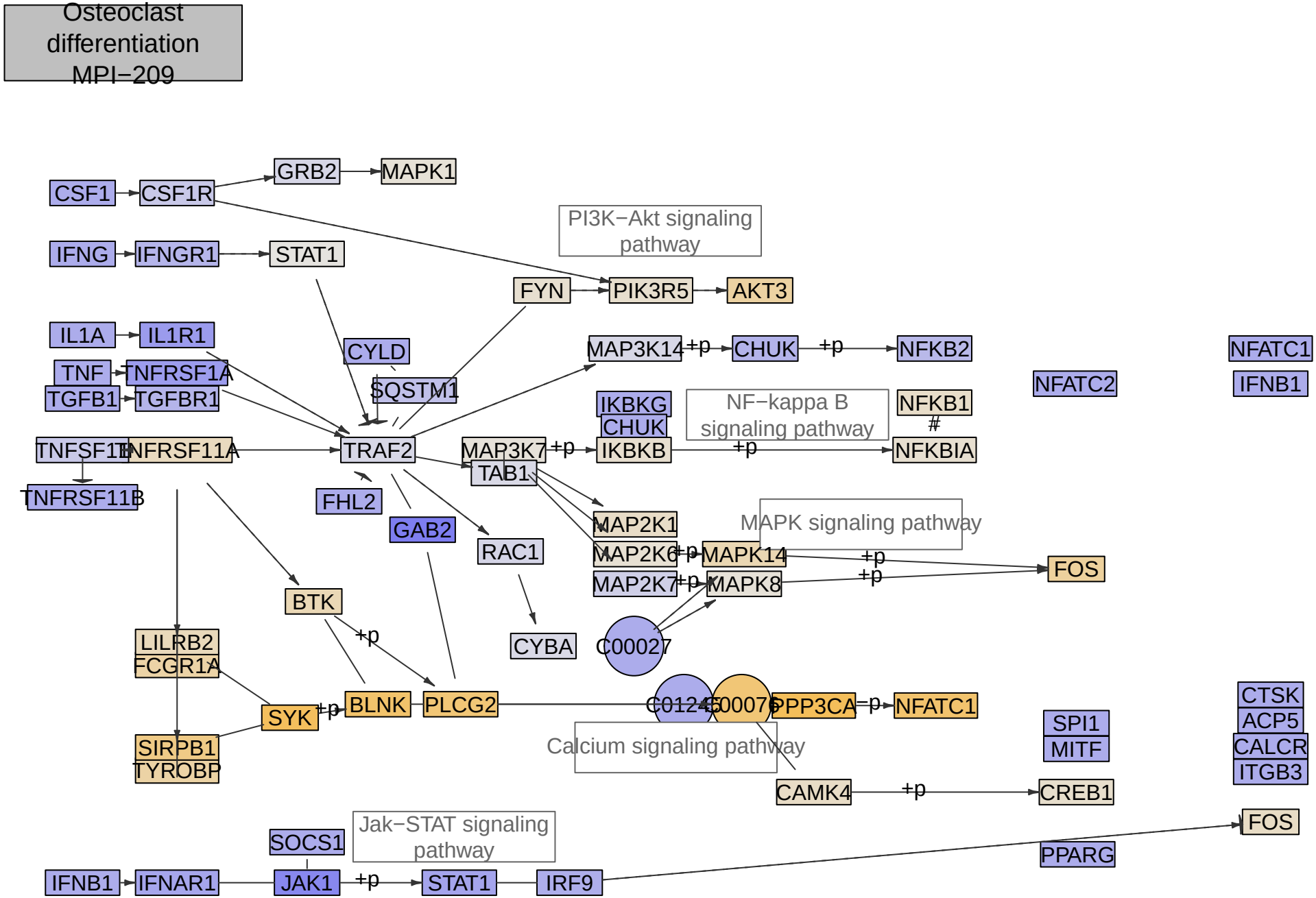
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−209
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CSF1R
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IFNGR1
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FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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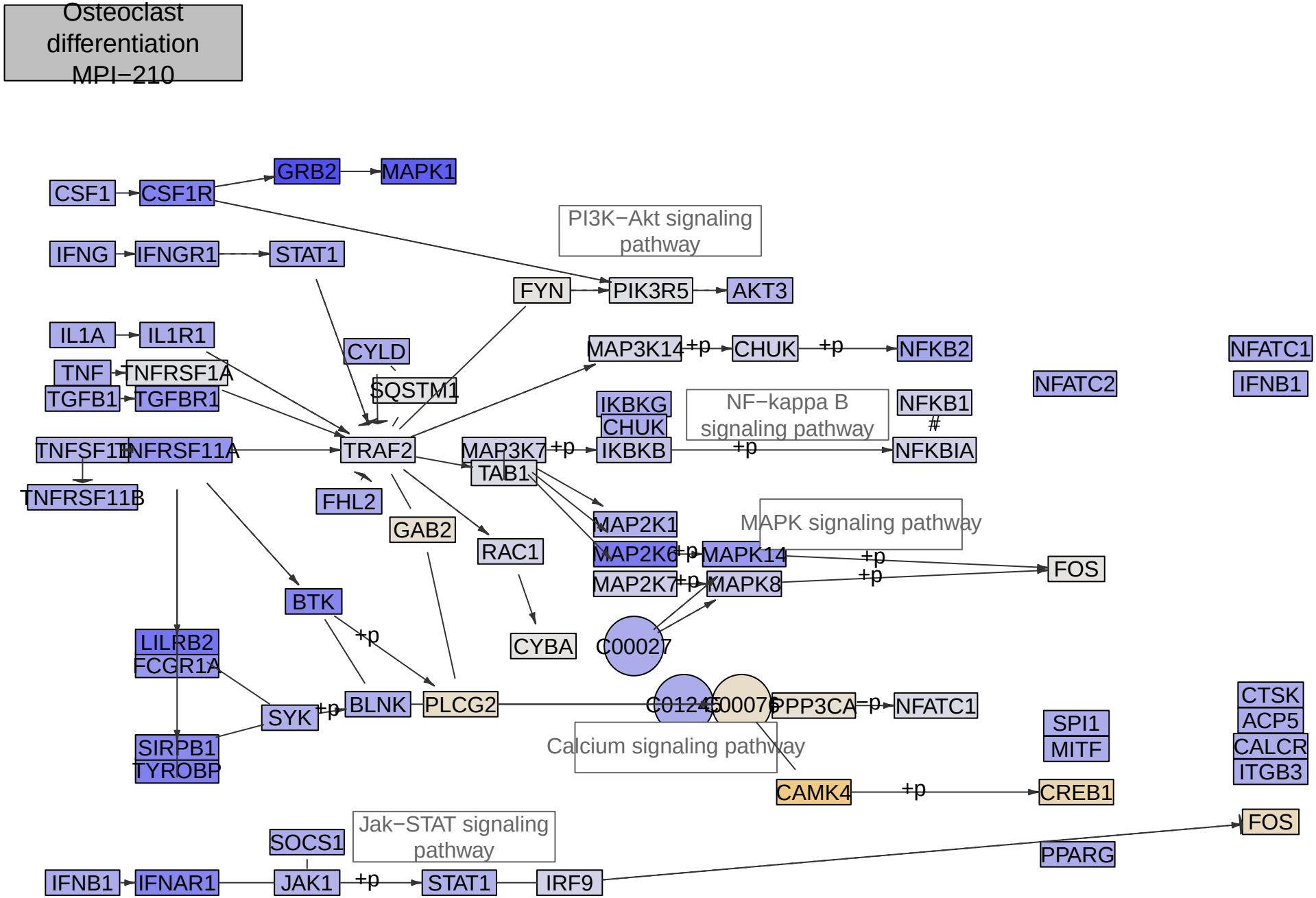
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
Jak−STAT signaling pathway
SOCS1
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−210
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FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
CAMK4
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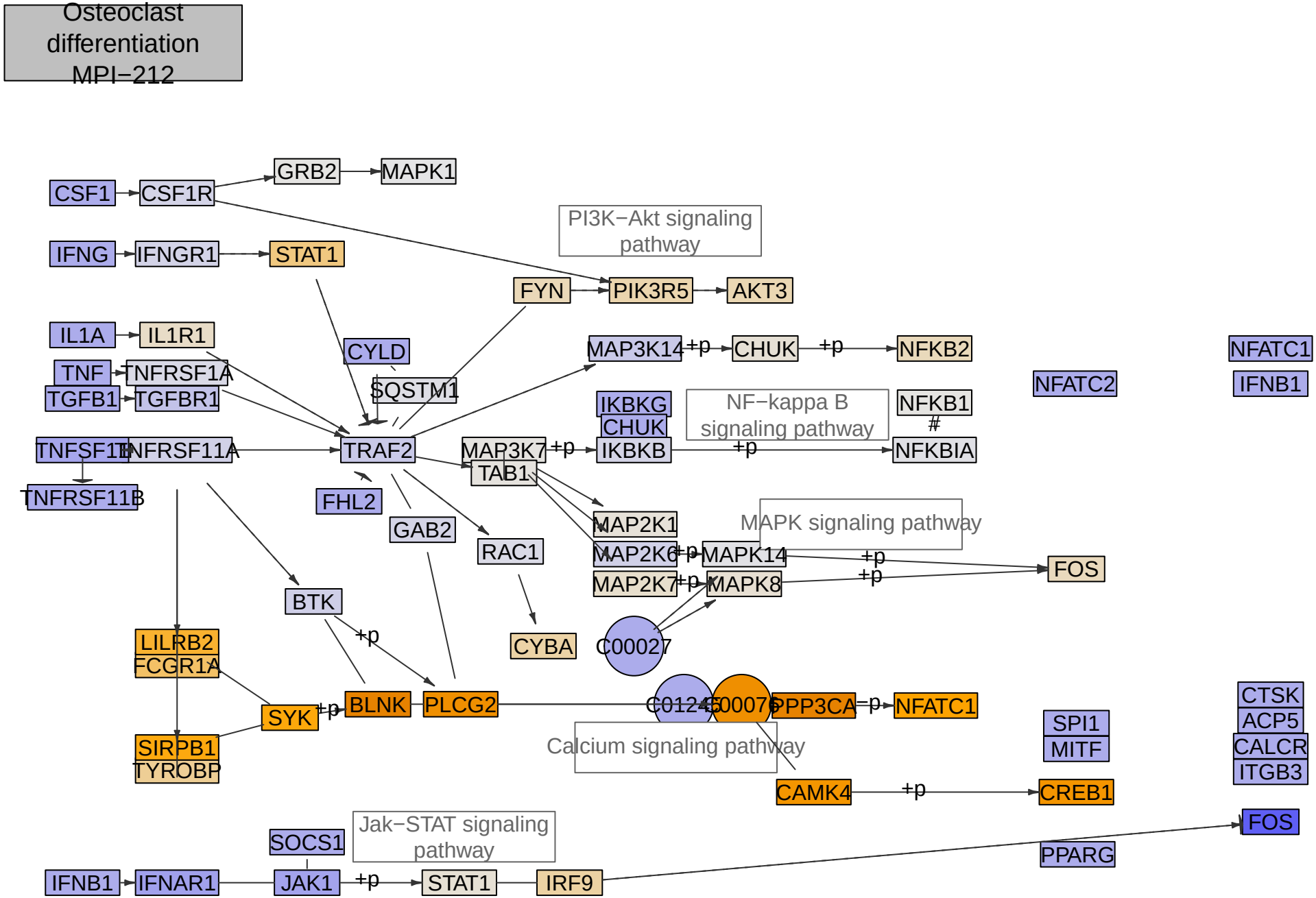
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9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STAT1
FYN
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AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
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CTSK
ACP5
CALCR
ITGB3
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
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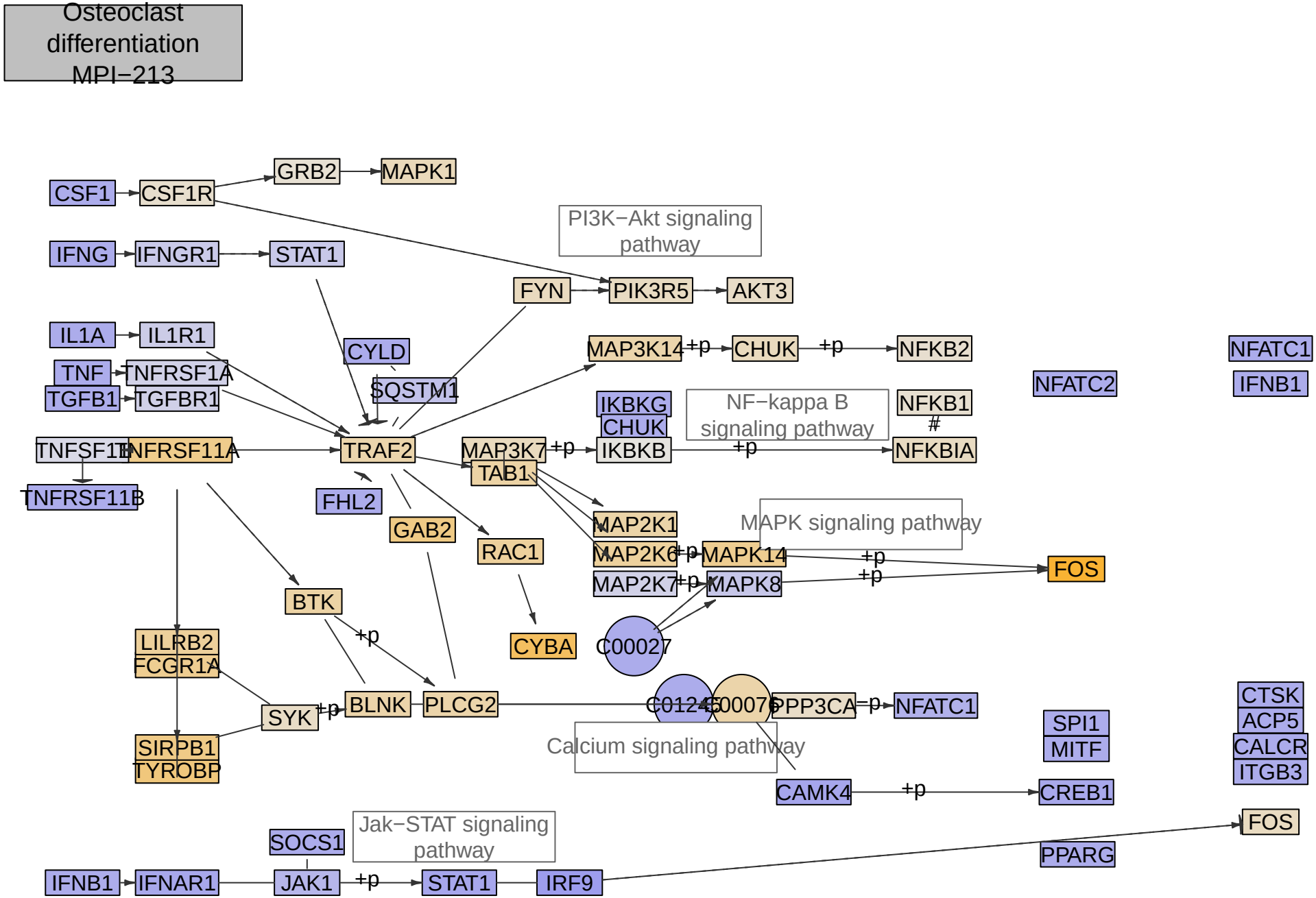
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−213
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CSF1R
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IFNGR1
STAT1
FYN
PIK3R5
AKT3
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IL1R1
CYLD
MAP3K14
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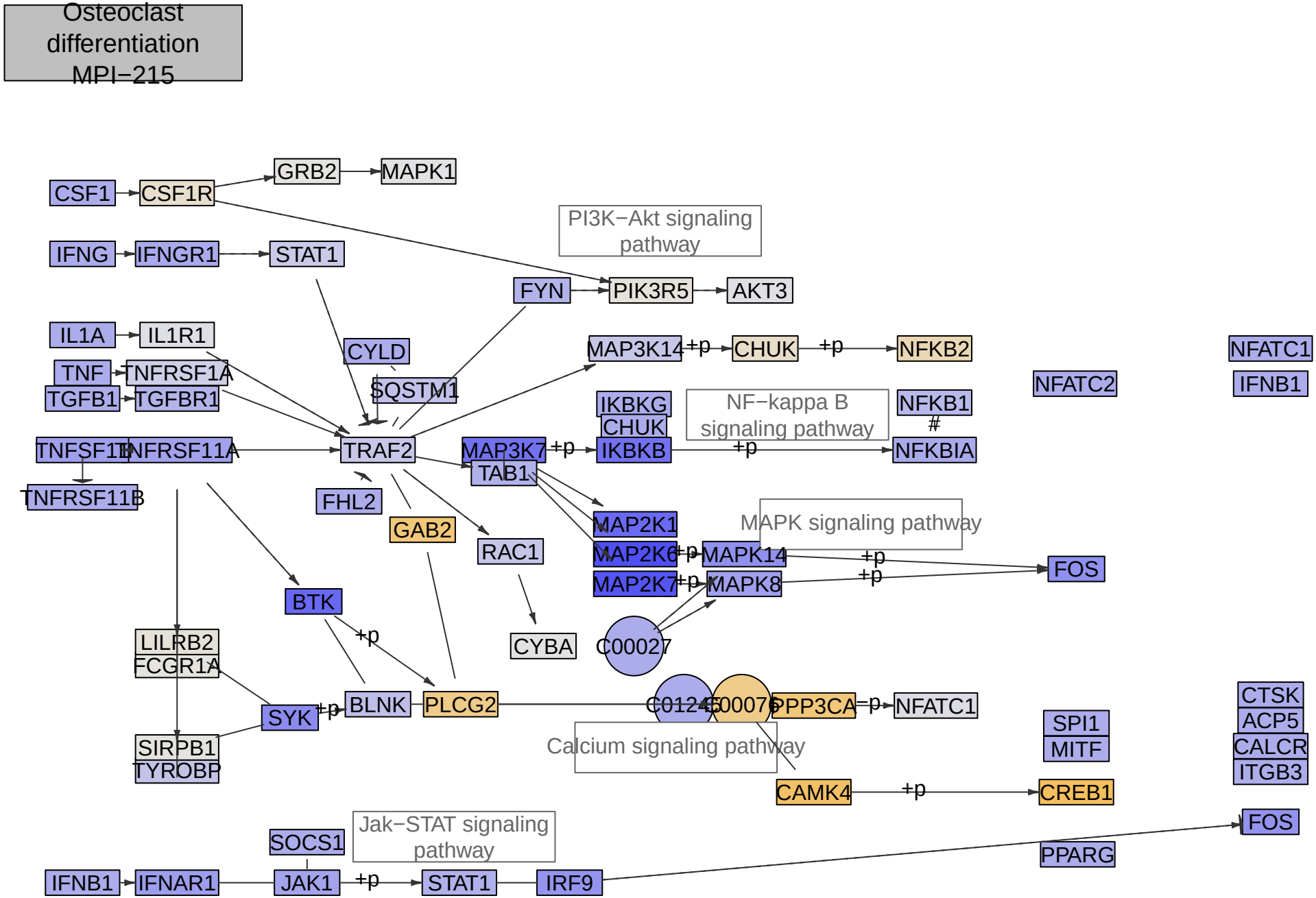
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9
PPARG


Osteoclast differentiation MPI−215
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IFNGR1
STAT1
FYN
PIK3R5
AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
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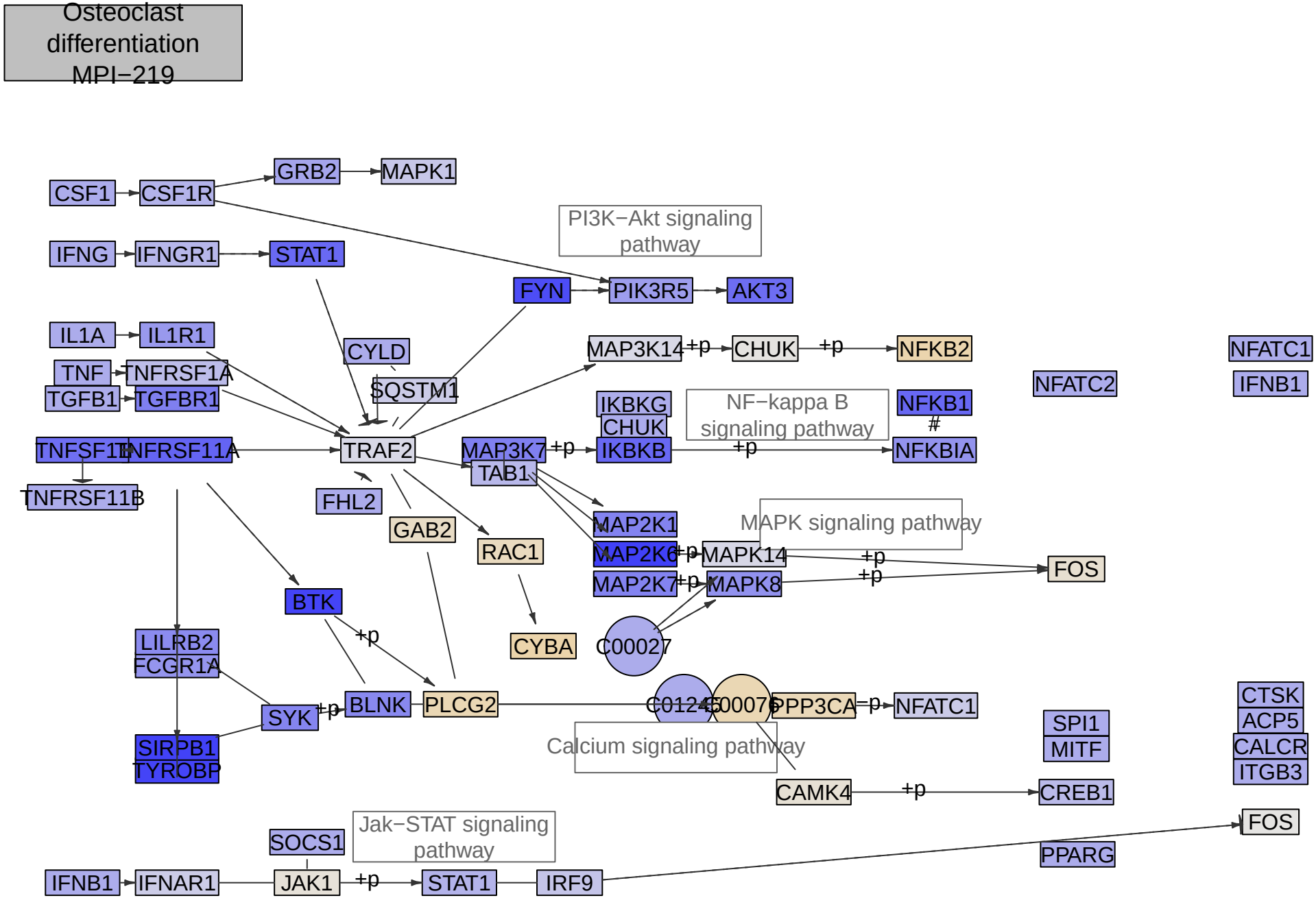
STAT1
IRF9


Osteoclast differentiation MPI−219
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CSF1R
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IFNGR1
STAT1
FYN
PIK3R5
AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
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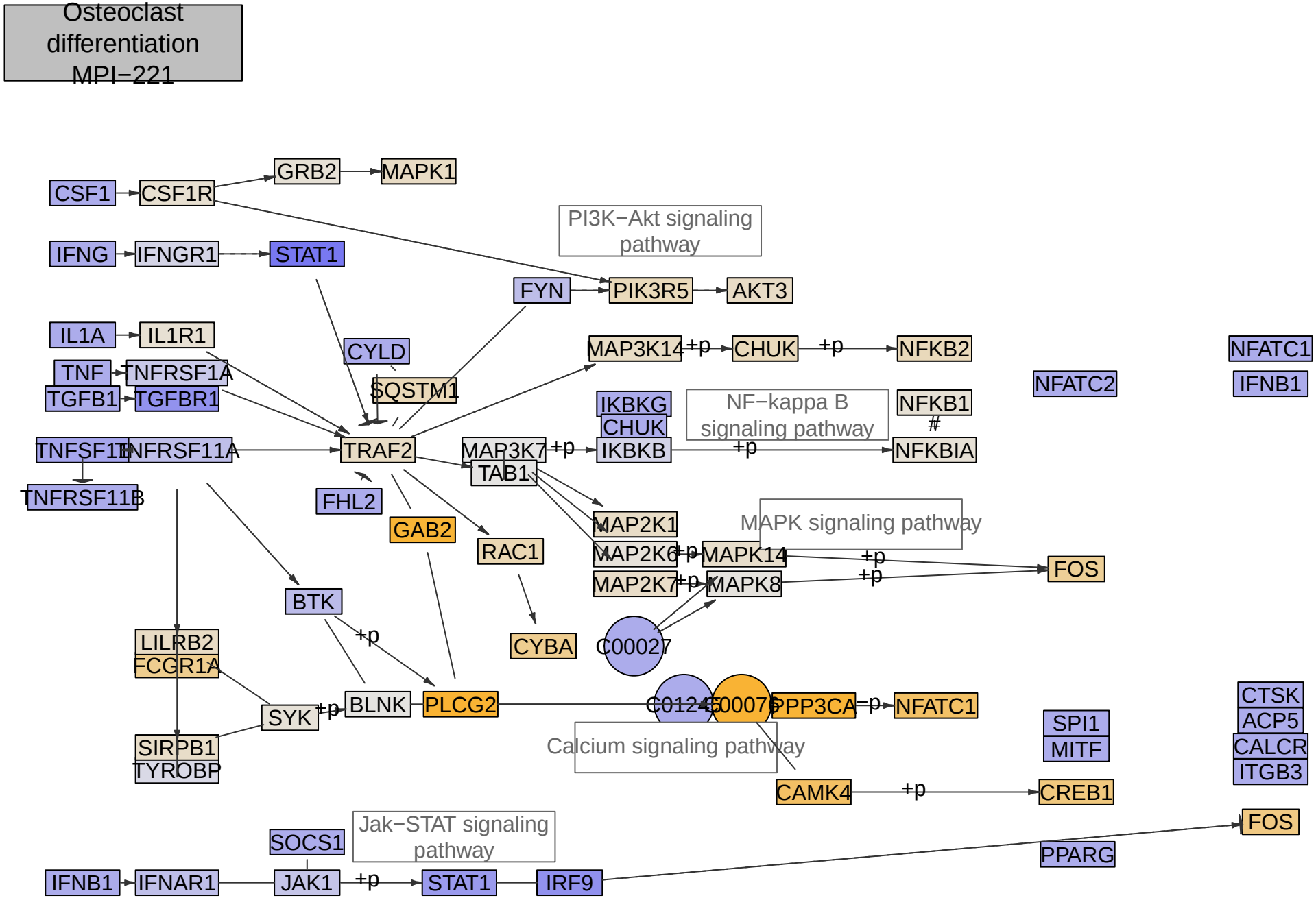
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−221
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STAT1
FYN
PIK3R5
AKT3
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IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
=p
NFATC1
CTSK
ACP5
SPI1
MITF
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
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CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
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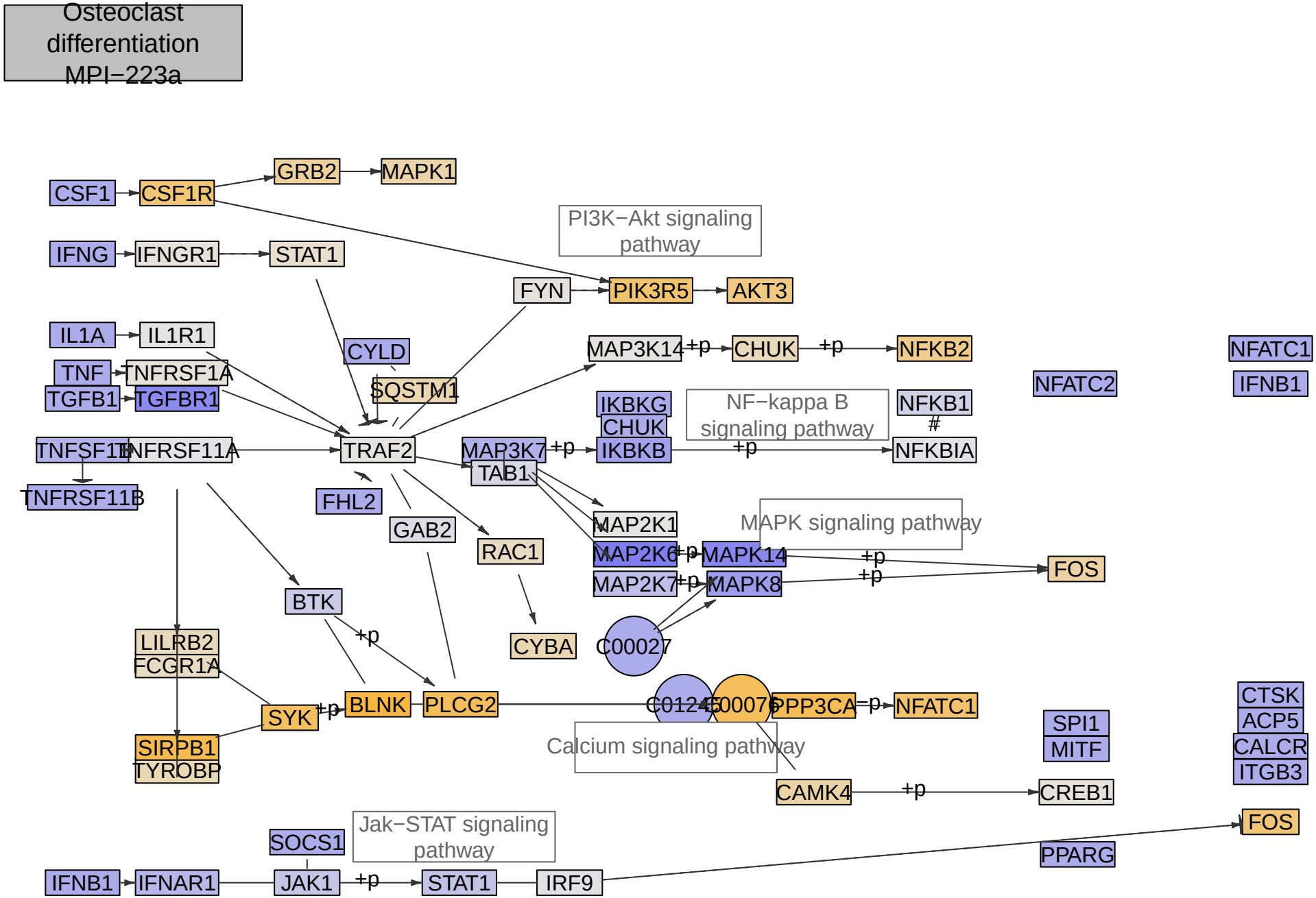
STAT1
IRF9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PI3K−Akt signaling pathway
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IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
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FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
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CREB1
FOS
SOCS1
Jak−STAT signaling pathway
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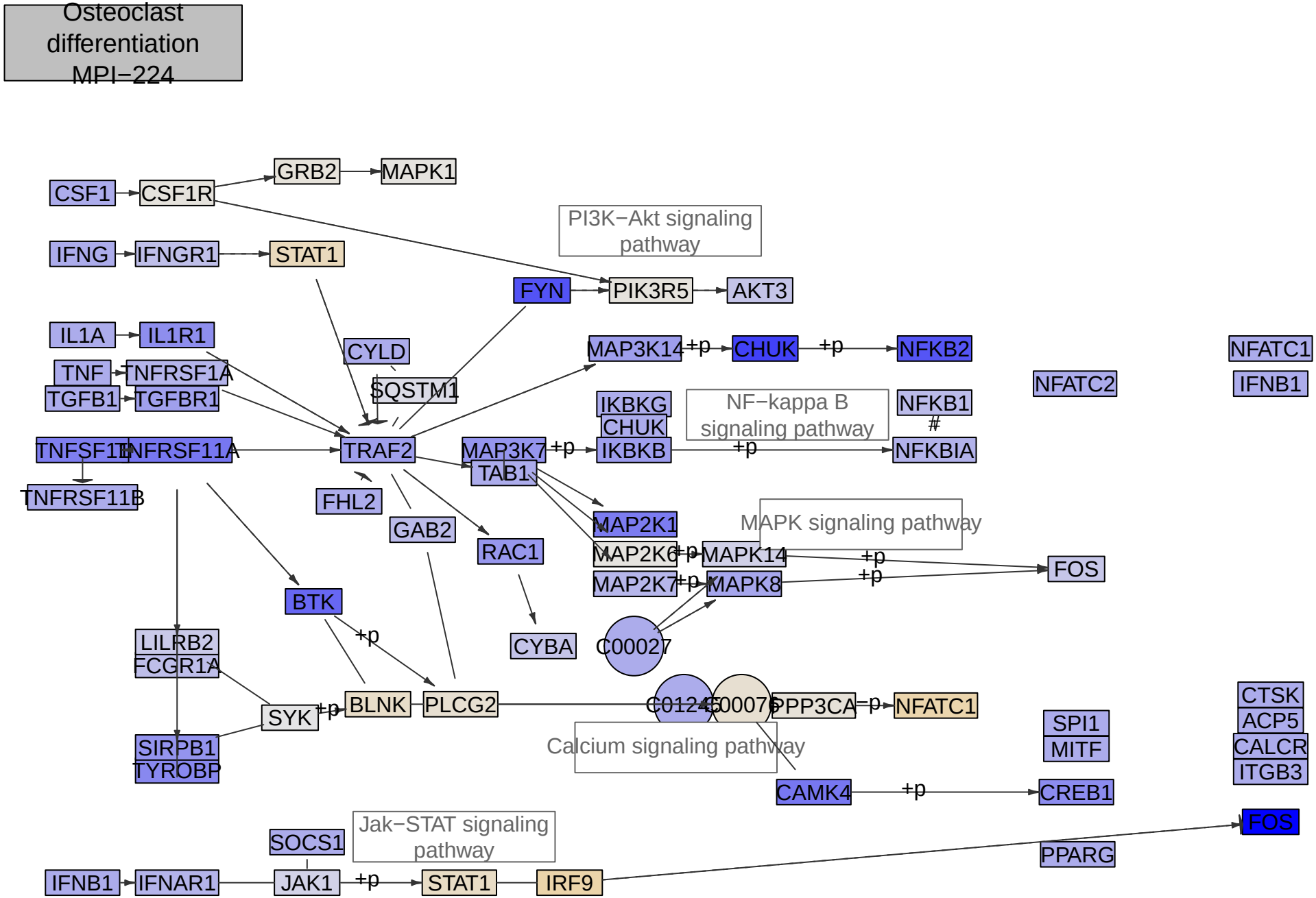
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9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PI3K−Akt signaling pathway
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AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
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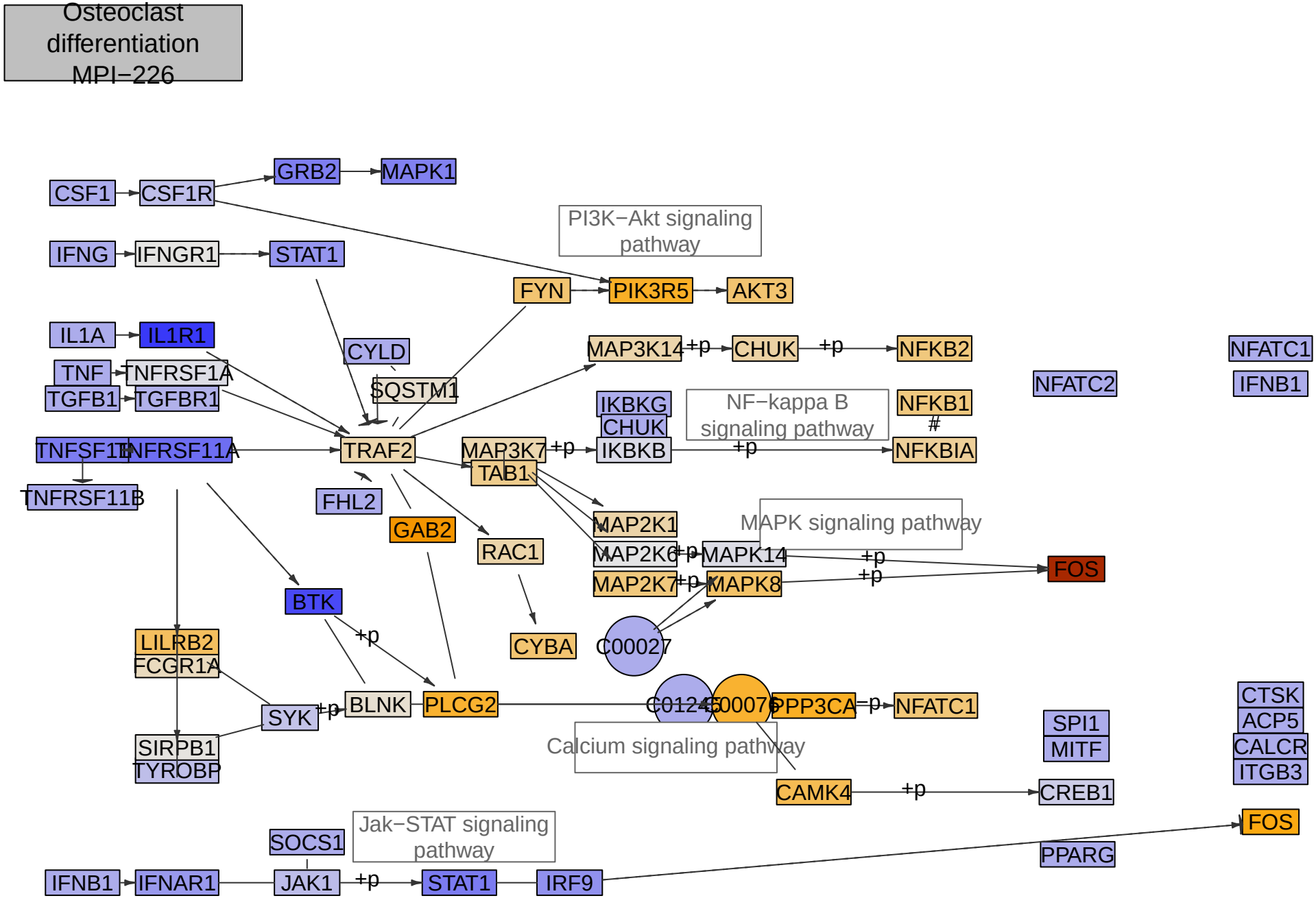
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9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PI3K−Akt signaling pathway
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STAT1
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AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
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NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
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ACP5
SPI1
MITF
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TYROBP
Calcium signaling pathway
CALCR
ITGB3
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SOCS1
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IFNAR1
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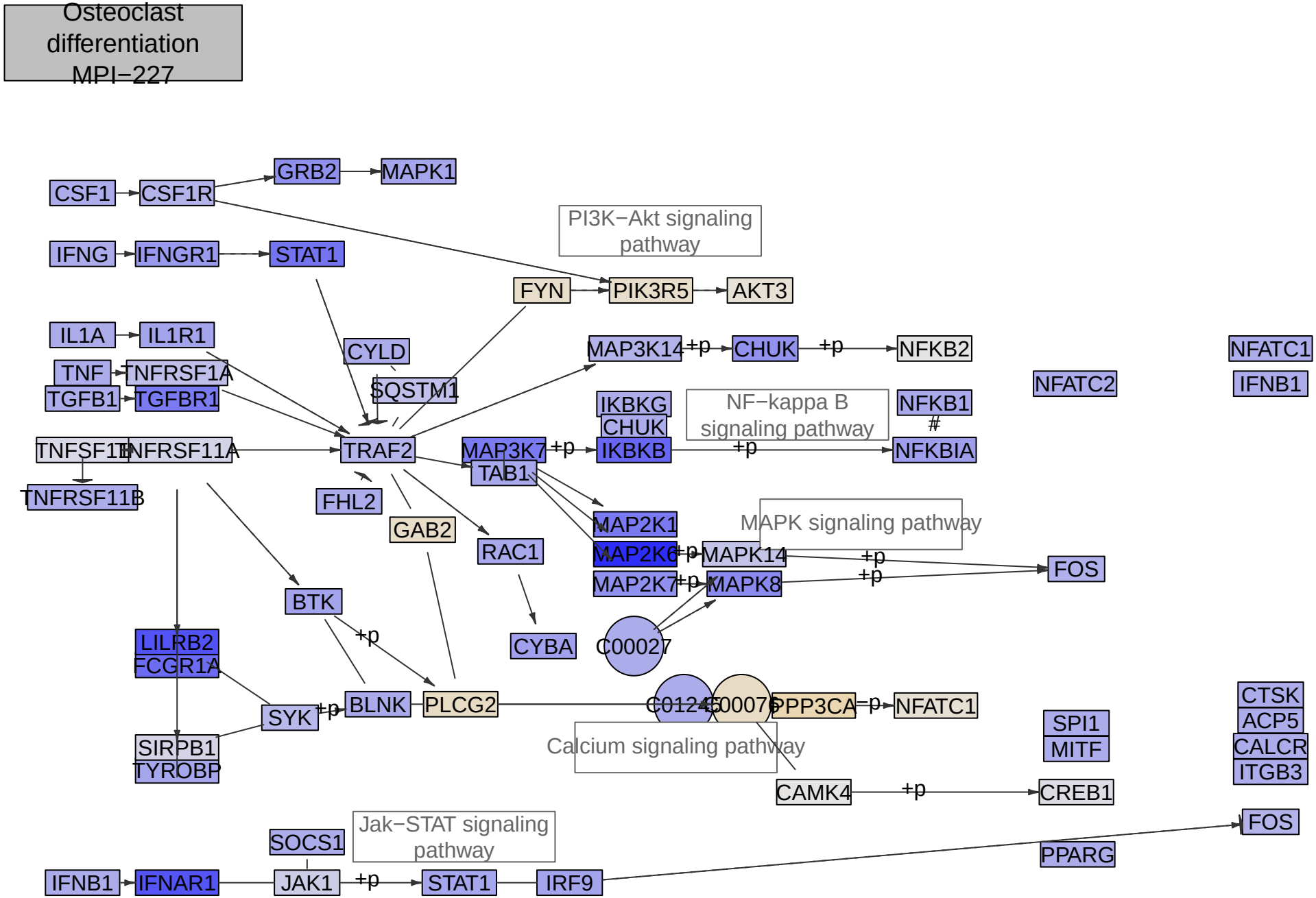
IRF9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STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
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TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
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FCGR1A
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CYBA
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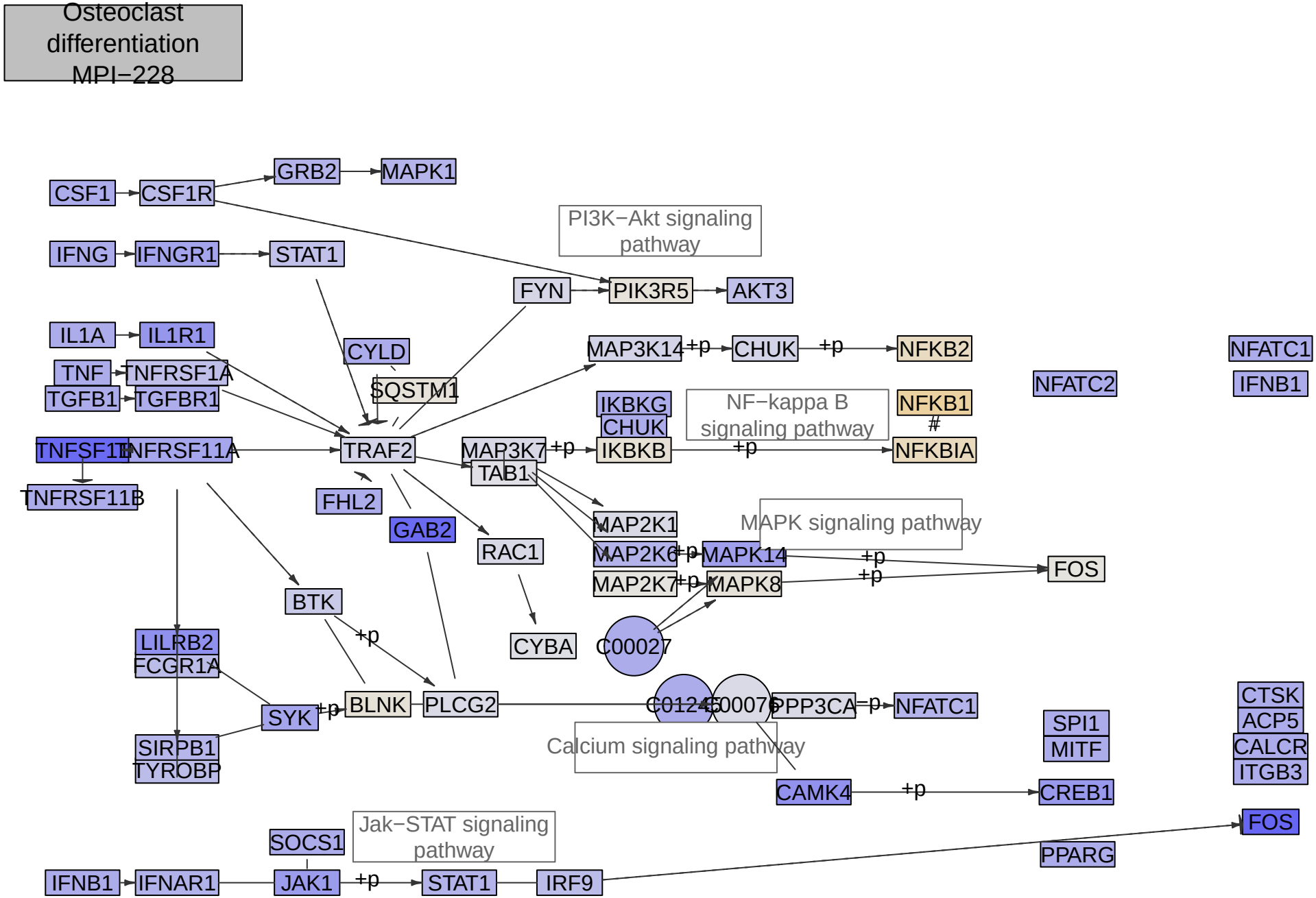
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MAP2K7
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MAPK8
+p
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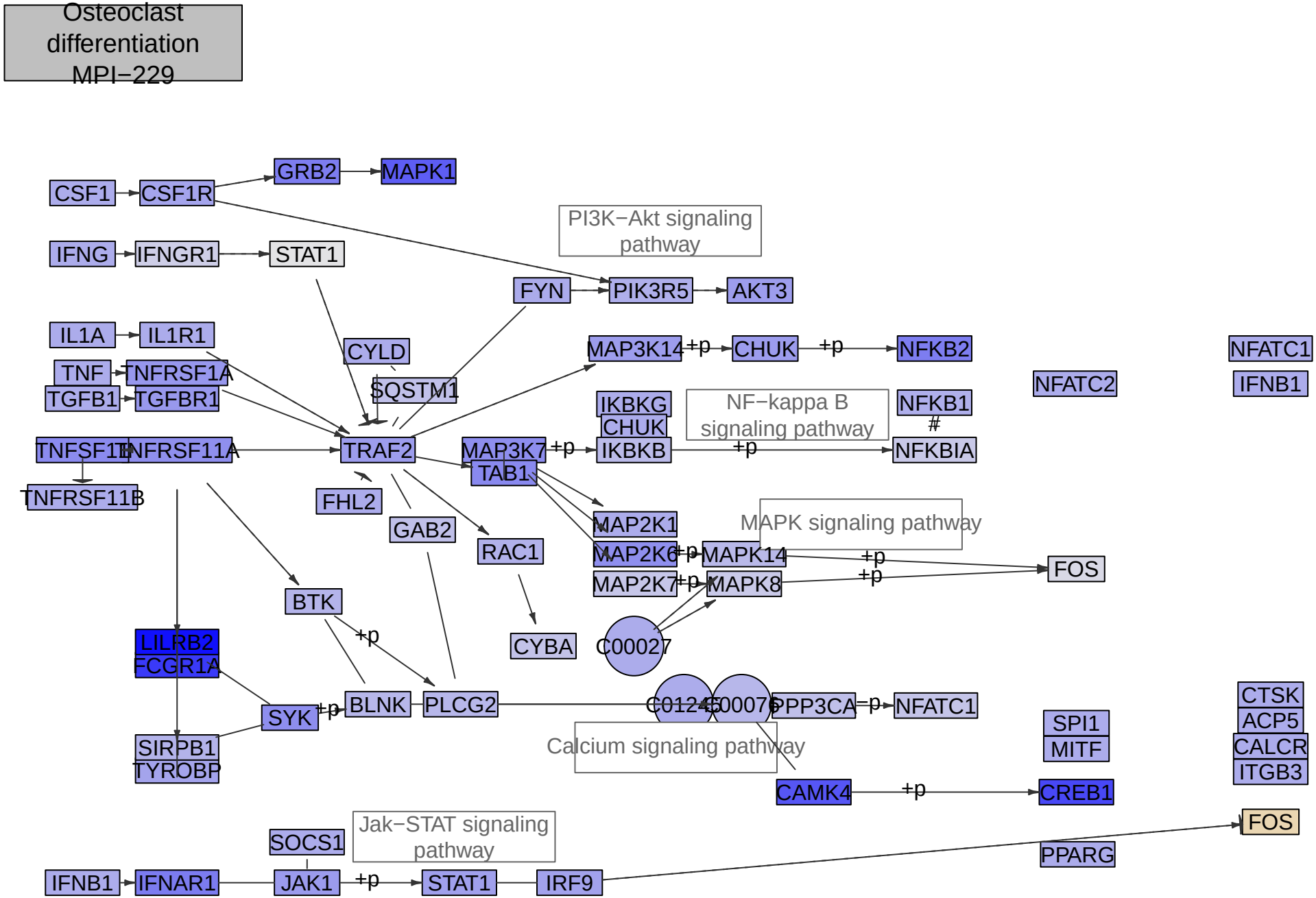
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MAP2K7
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MAPK8
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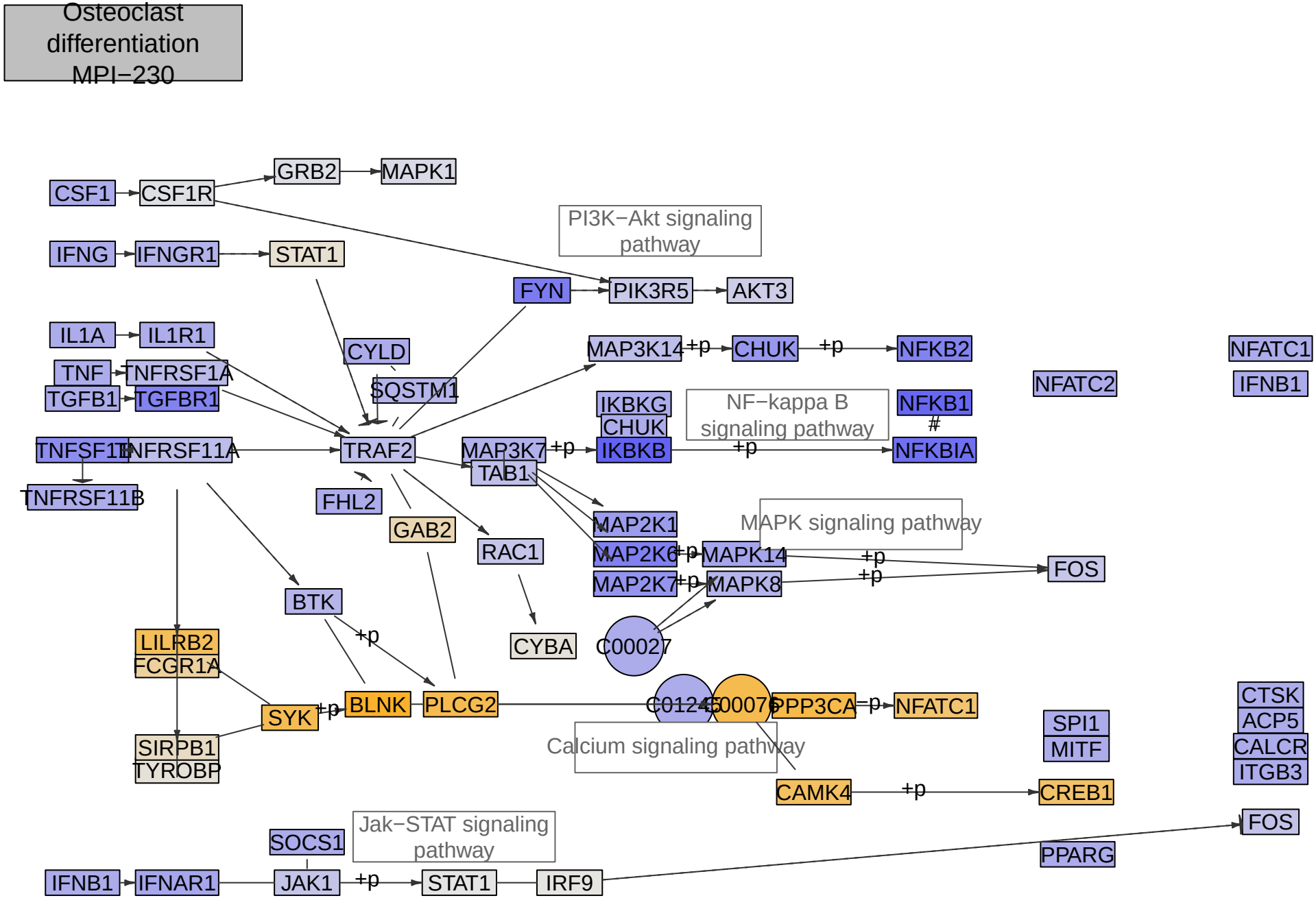
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CYLD
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MAPK signaling pathway
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MAPK8
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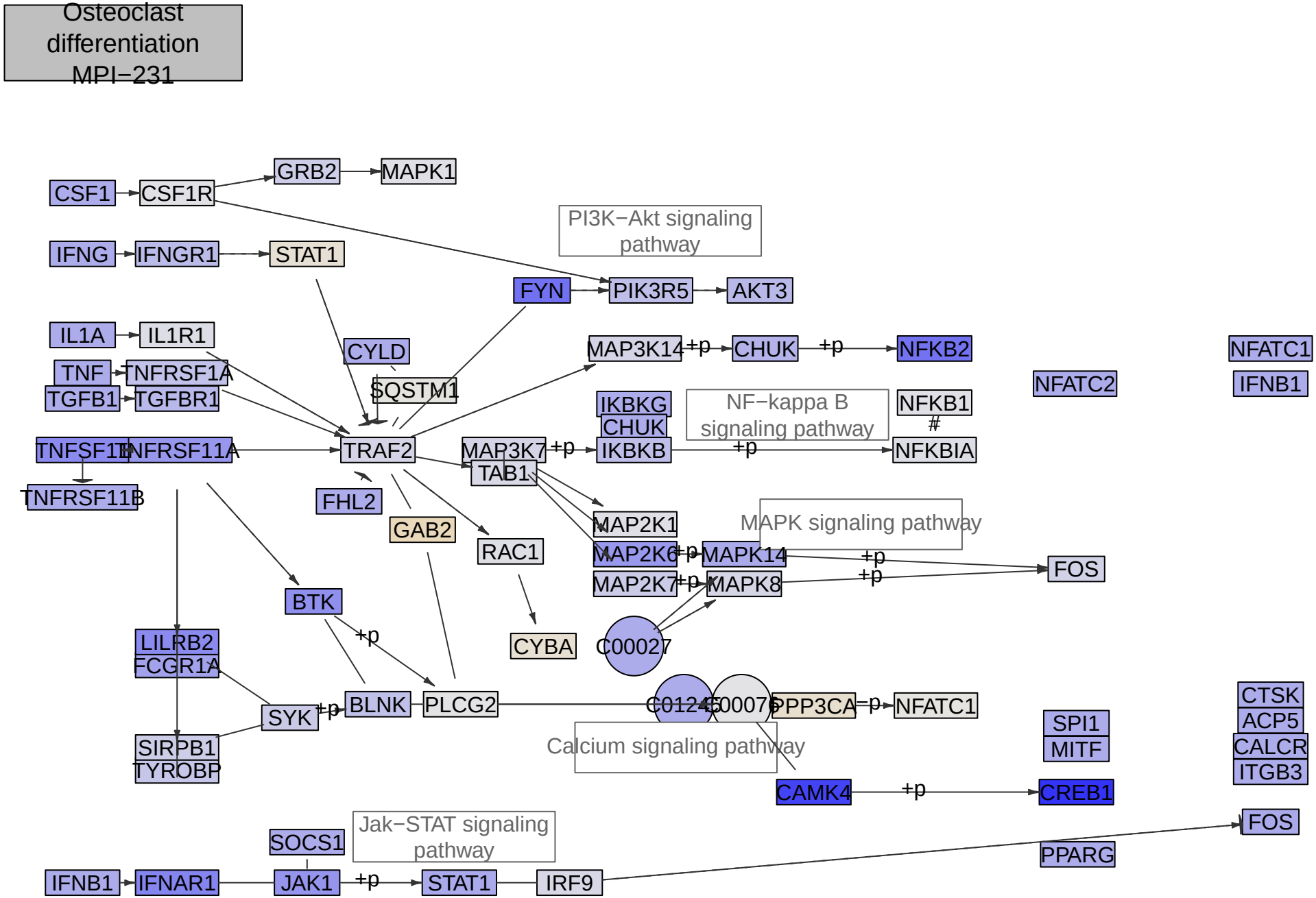
Osteoclast differentiation MPI−231
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NF−kappa B signaling pathway
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MAP2K1
MAPK signaling pathway
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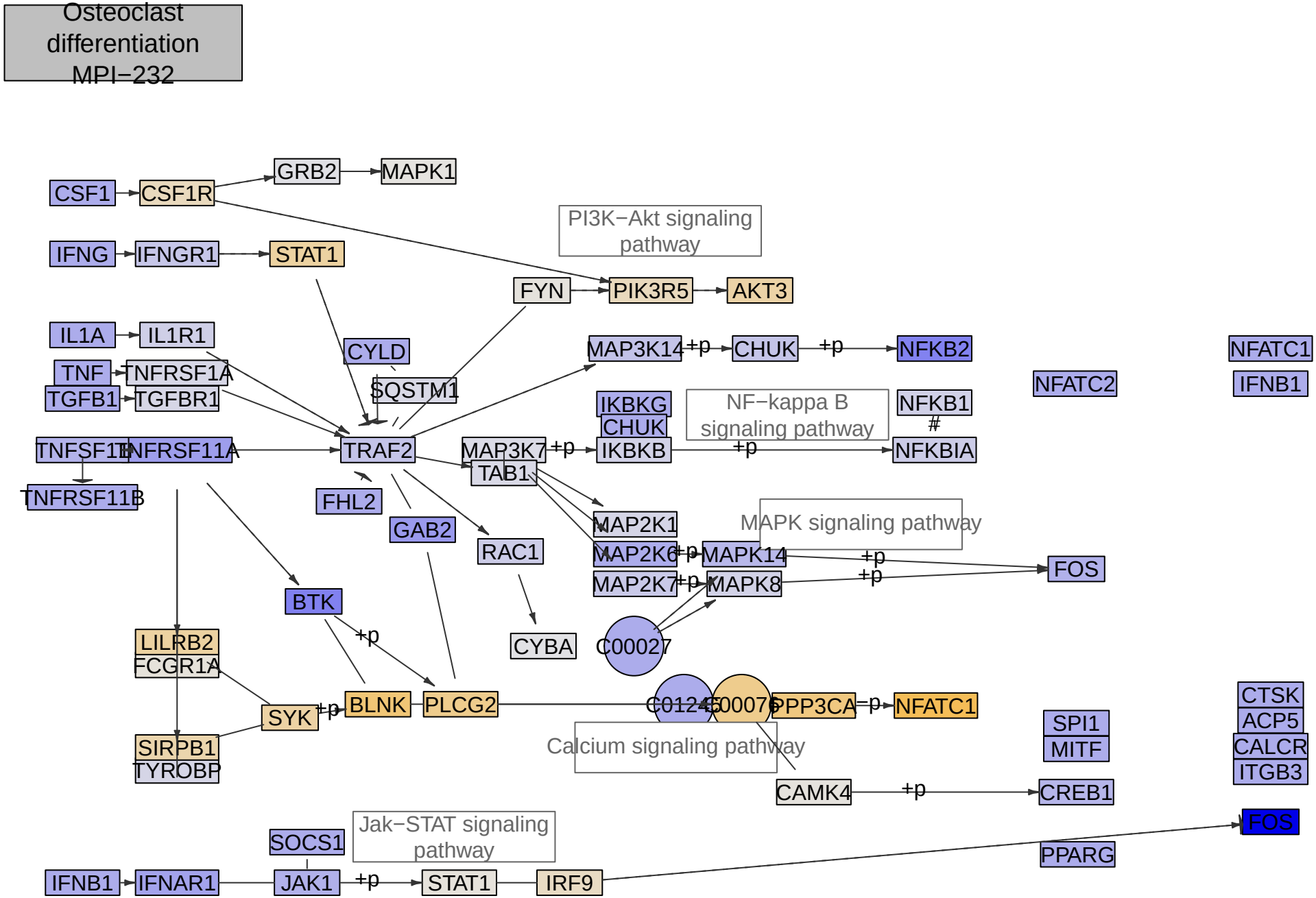
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NF−kappa B signaling pathway
NFKB1
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MAPK signaling pathway
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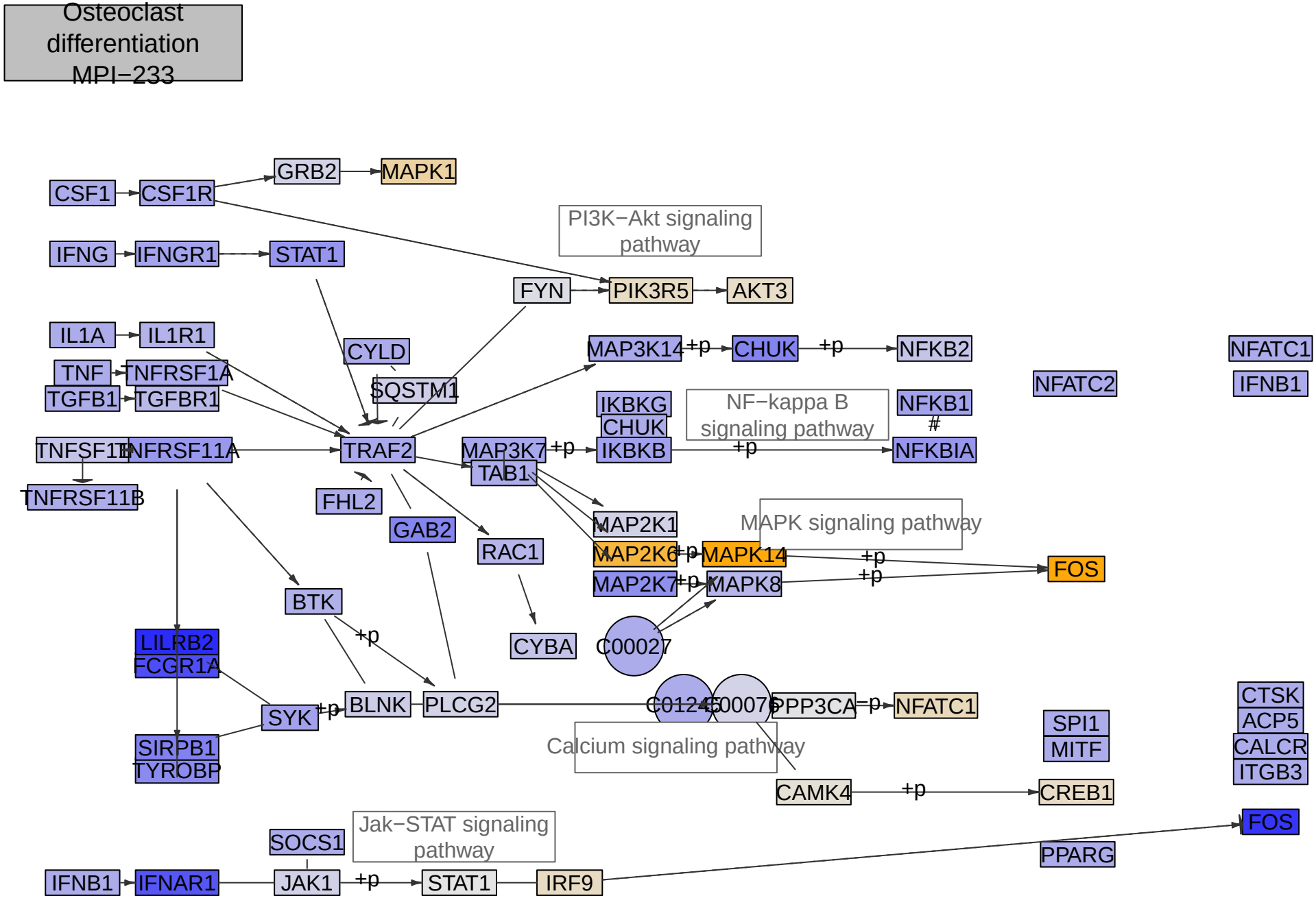
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NF−kappa B signaling pathway
NFKB1
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IKBKB
+p
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TAB1
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MAPK signaling pathway
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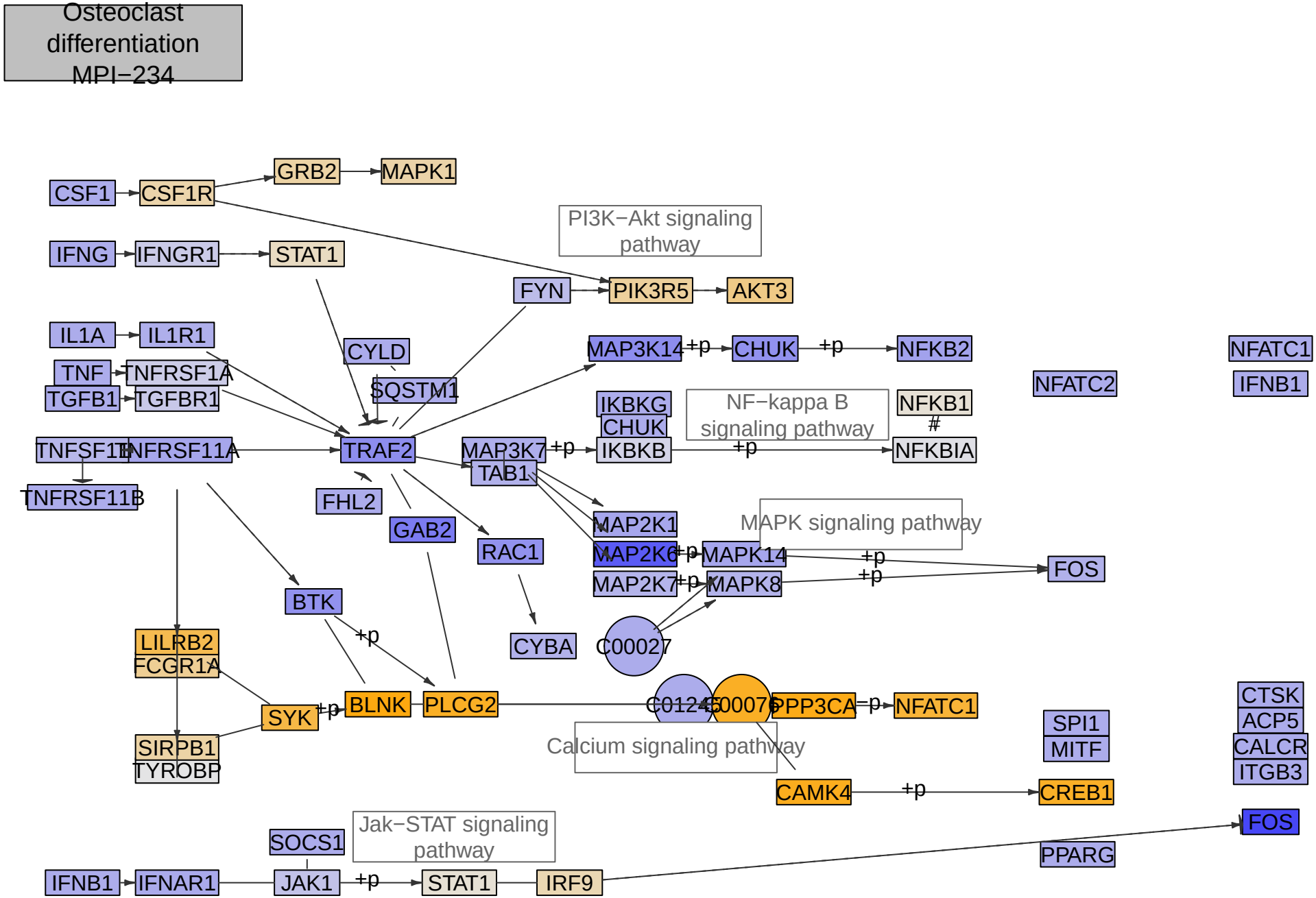
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MAPK signaling pathway
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MAP2K7
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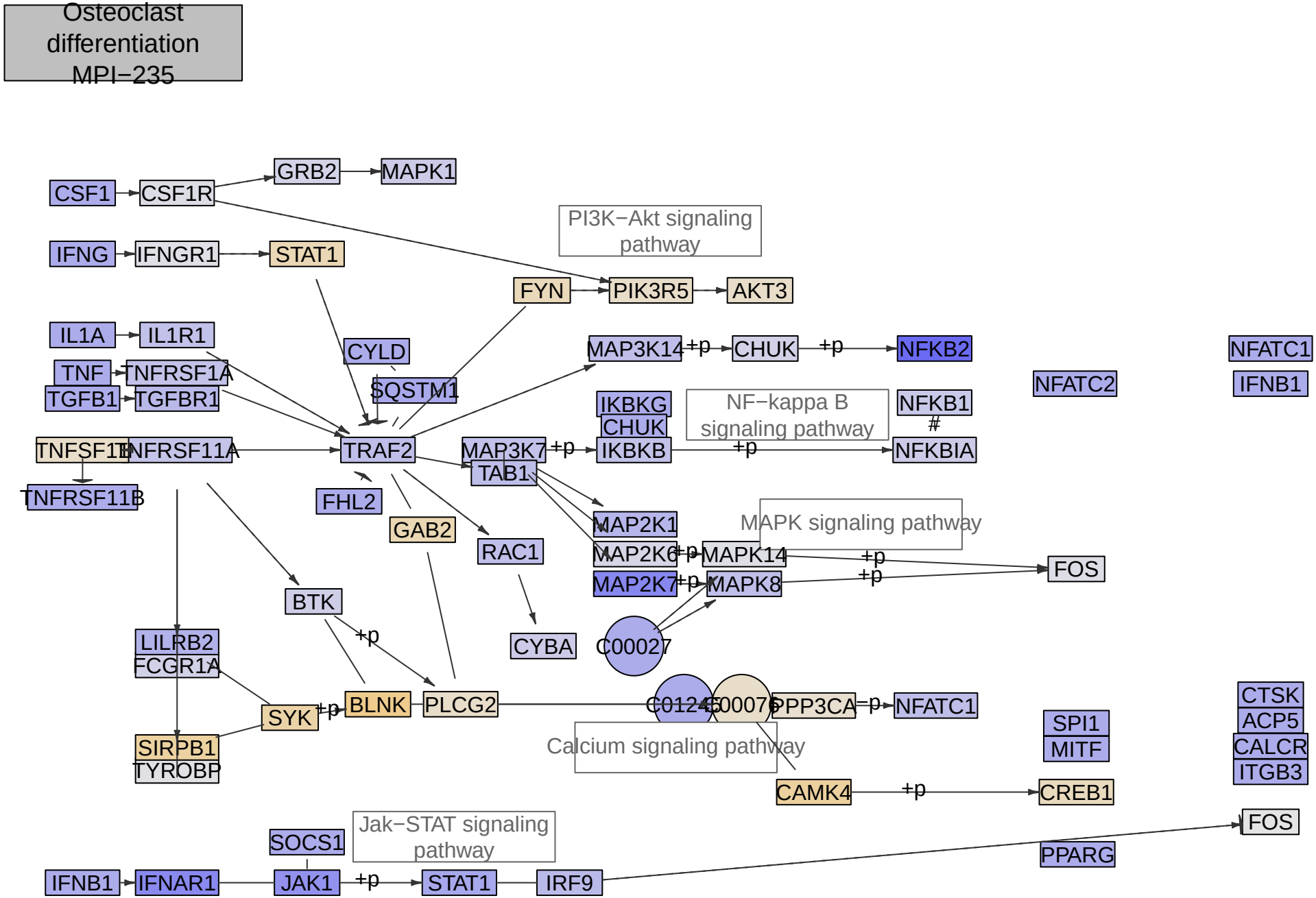
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MAPK8
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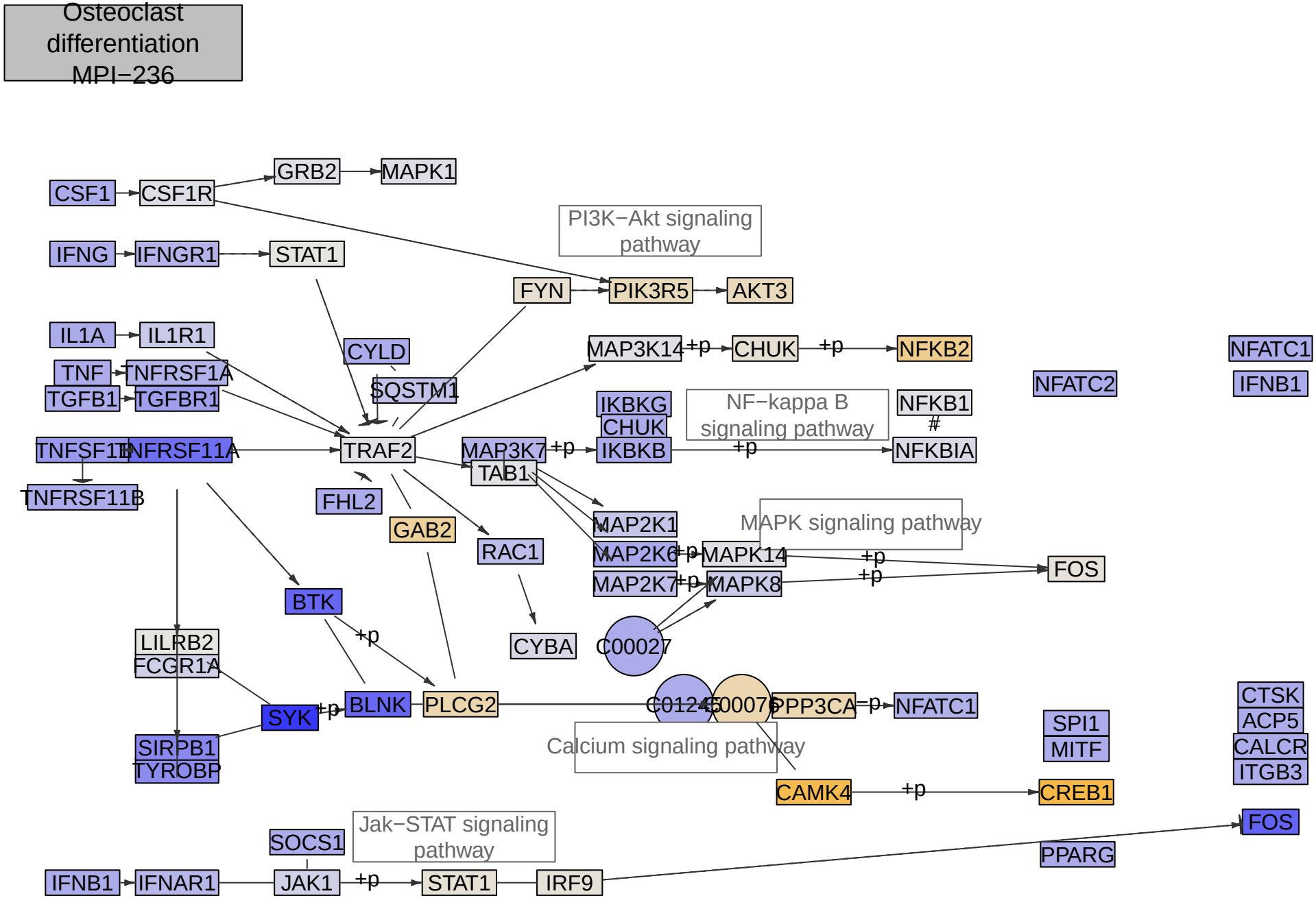
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TNFRSF11A
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Calcium signaling pathway
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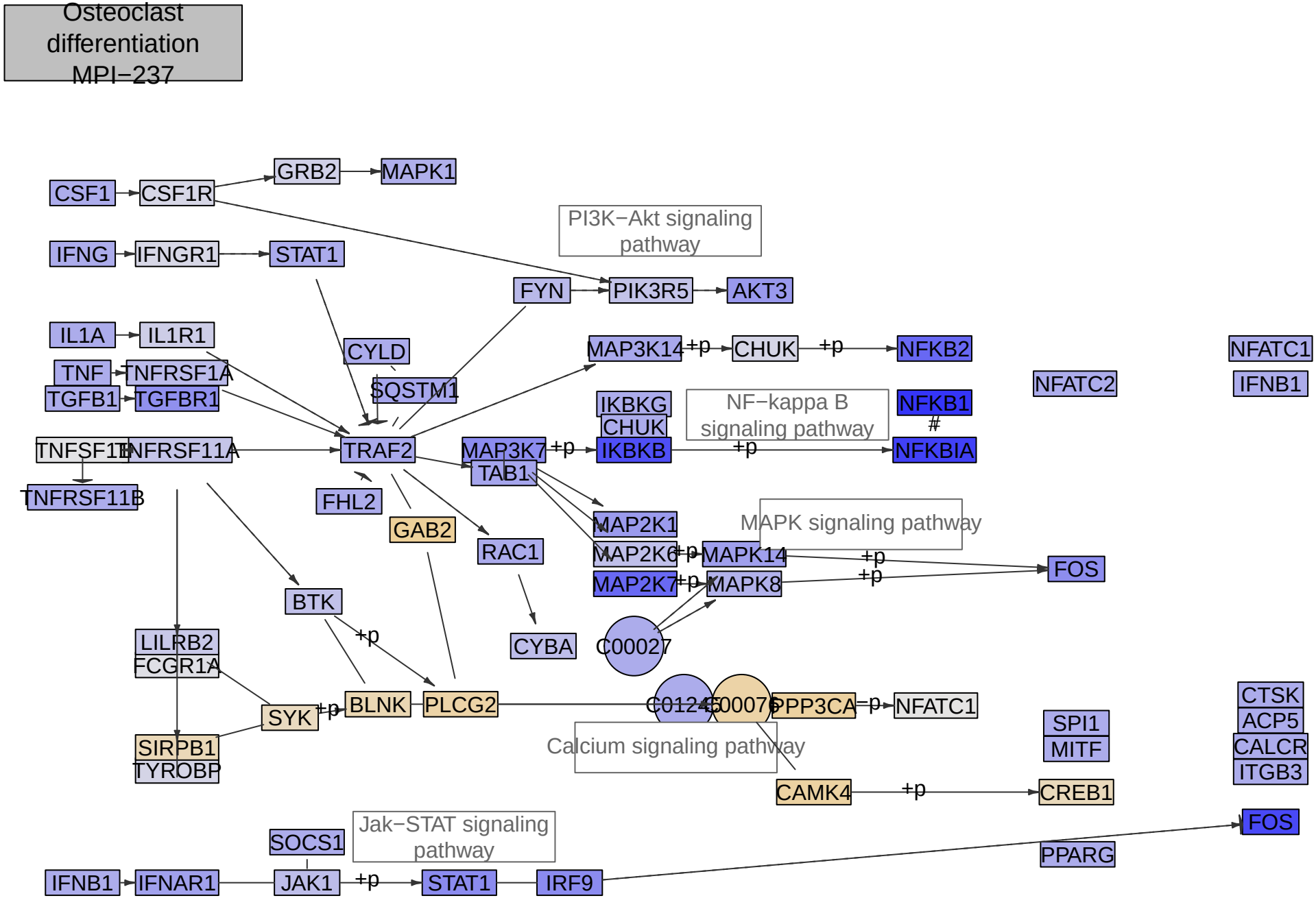
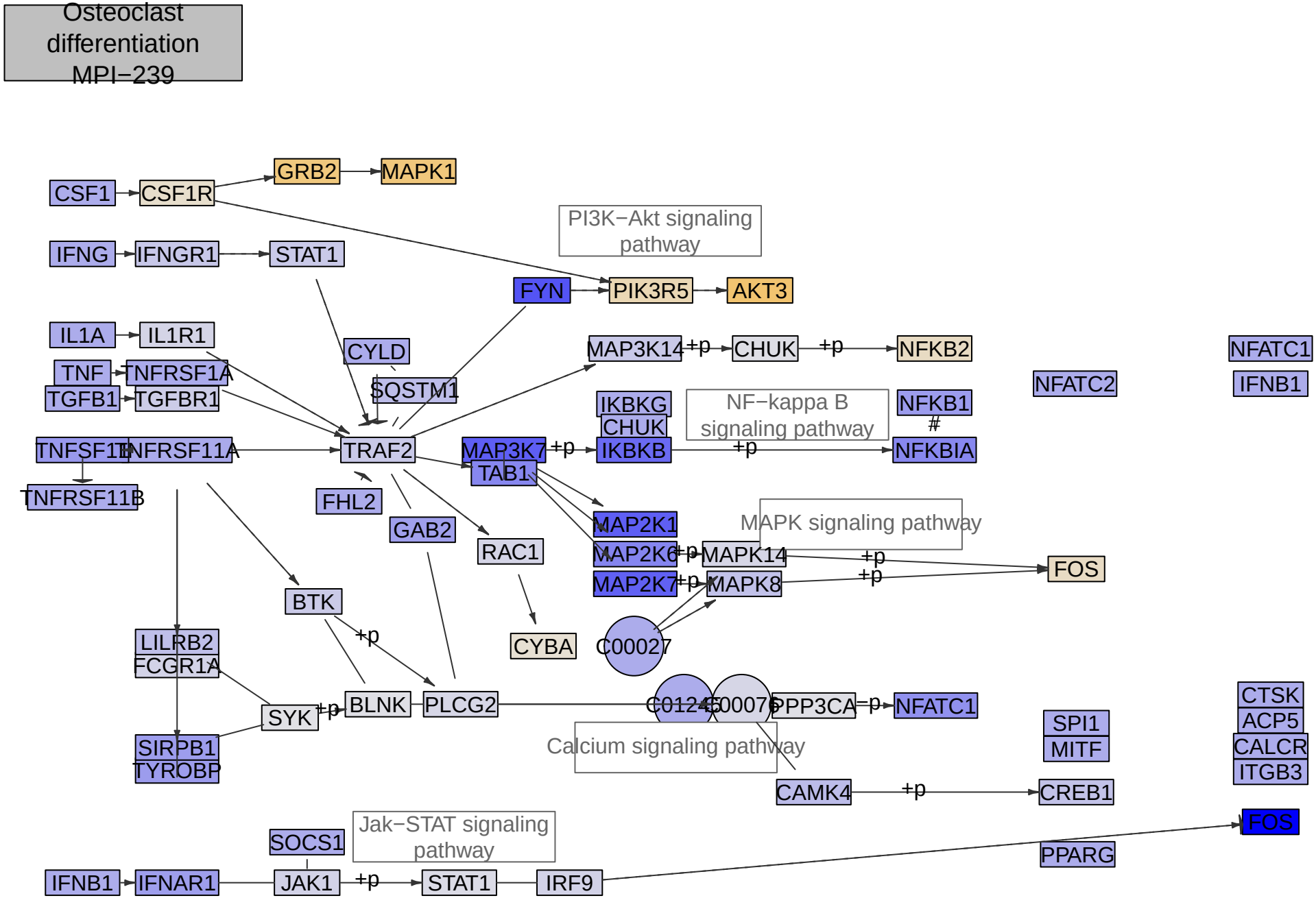
STAT1
IRF9


Osteoclast differentiation MPI−237
CSF1
CSF1R
GRB2
MAPK1
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−239
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MAPK1
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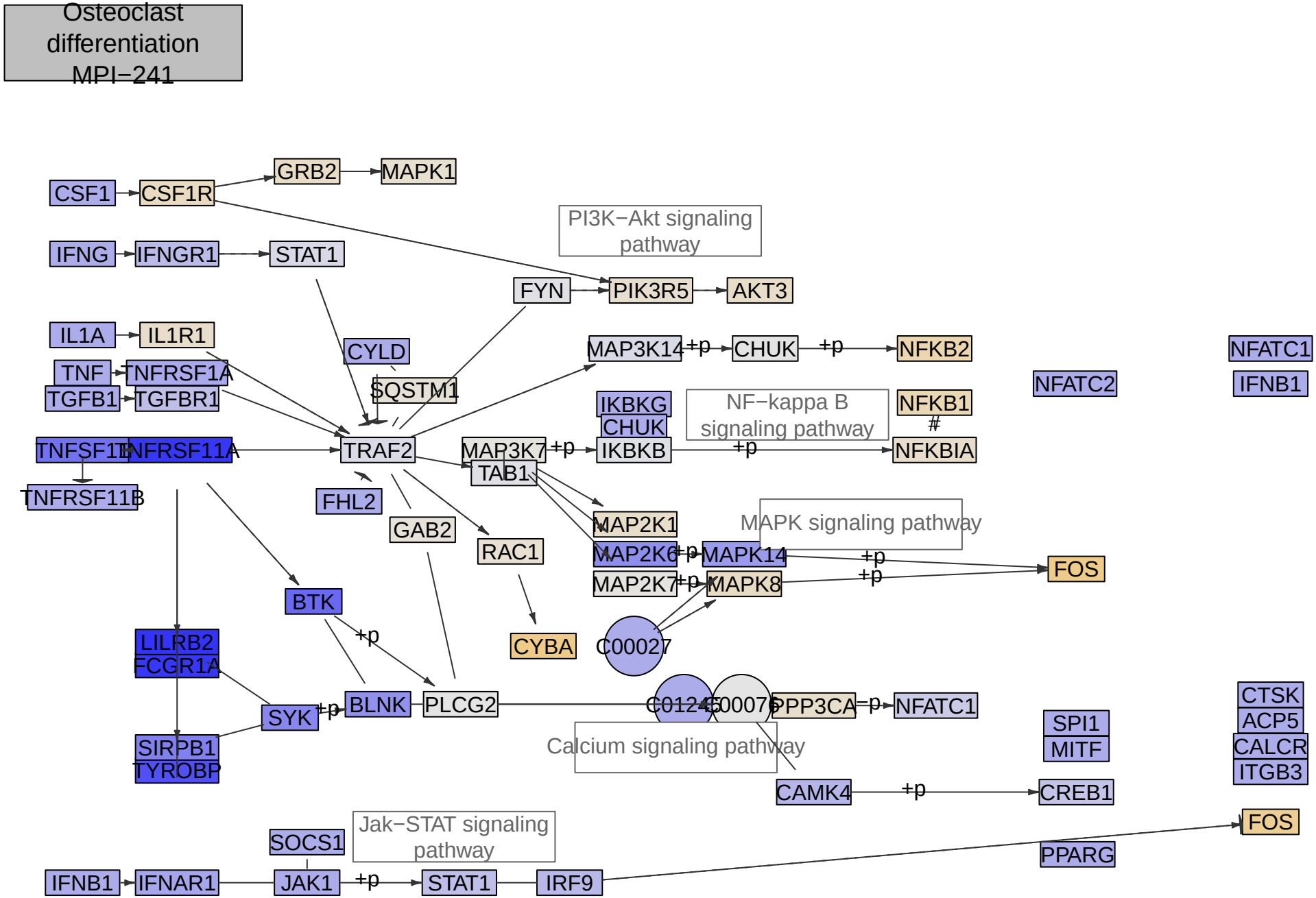
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
RAC1
MAP2K1
MAPK signaling pathway
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
=p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−241
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CSF1R
PI3K−Akt signaling pathway
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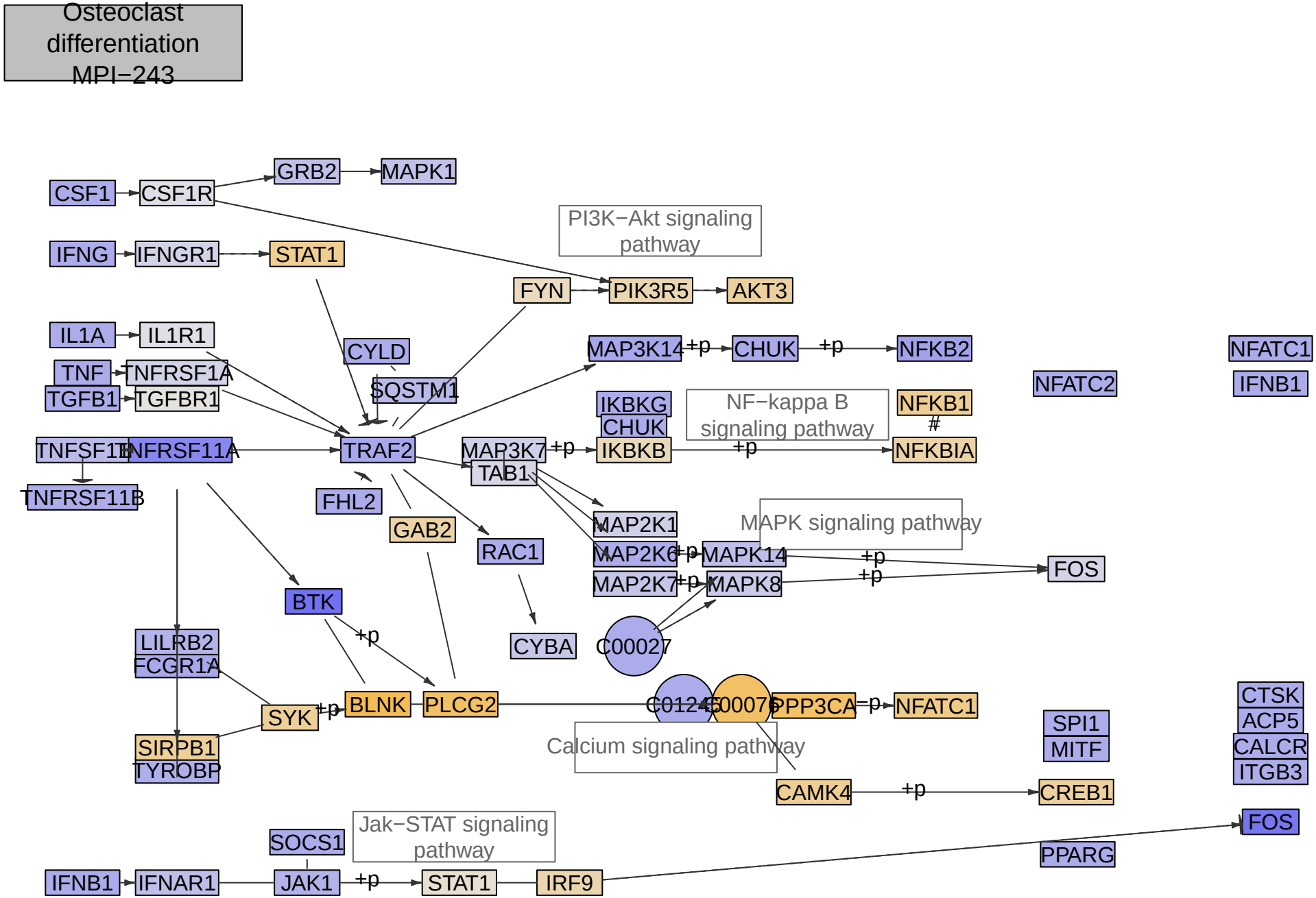
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
MAP2K1
MAPK signaling pathway
GAB2
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−243
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CSF1R
PI3K−Akt signaling pathway
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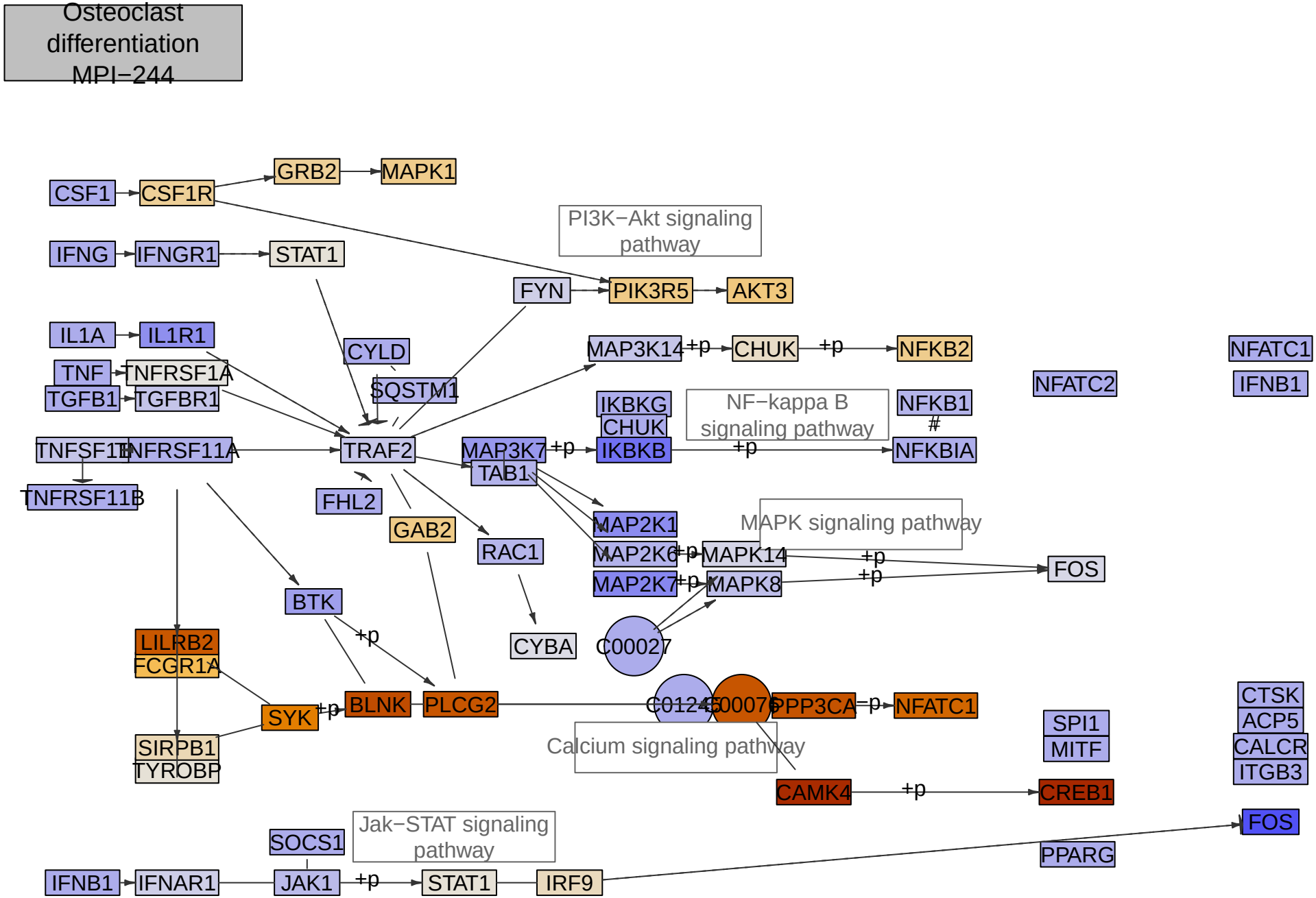
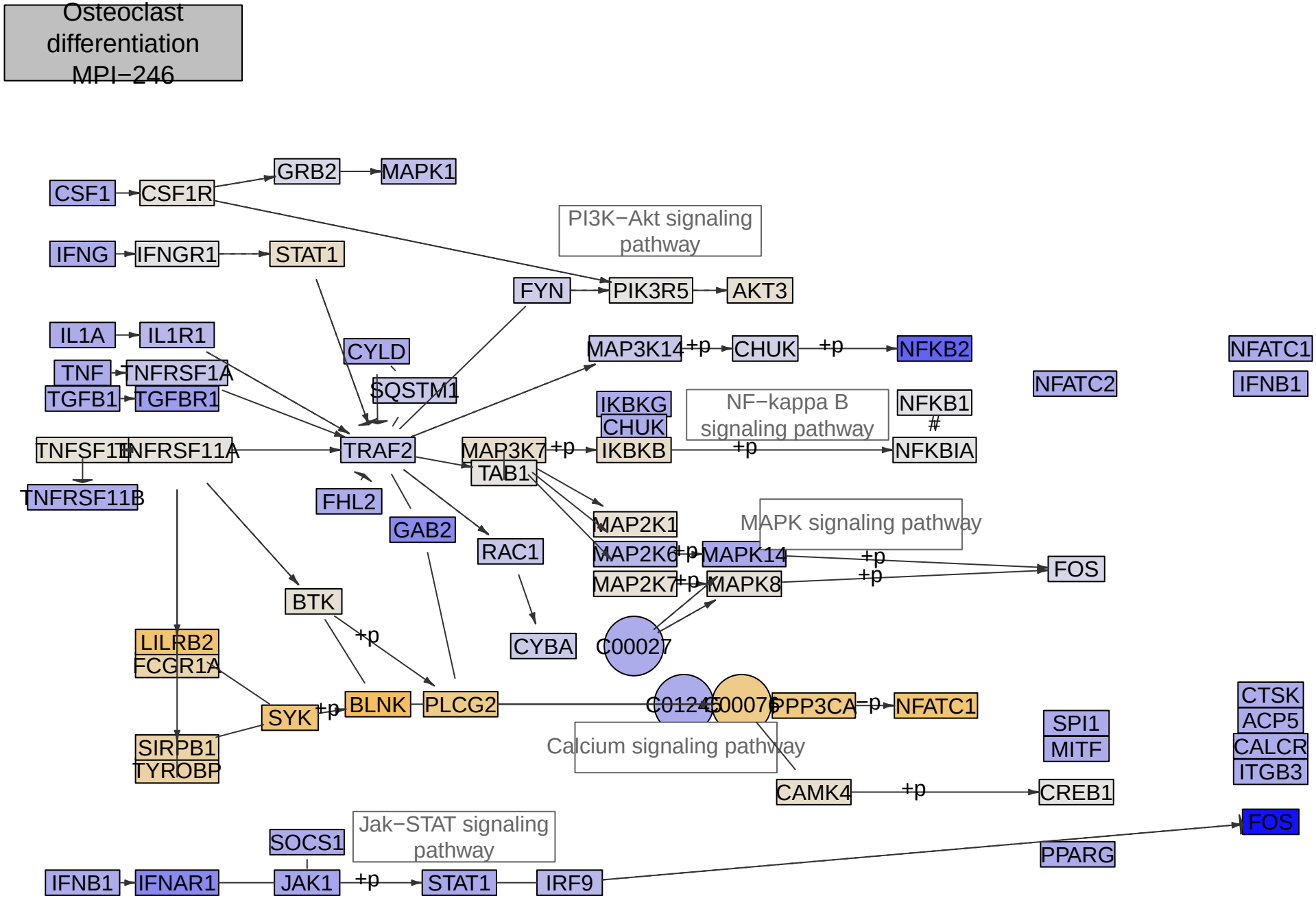
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−244
CSF1
CSF1R
GRB2
MAPK1
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
=p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−246
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MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
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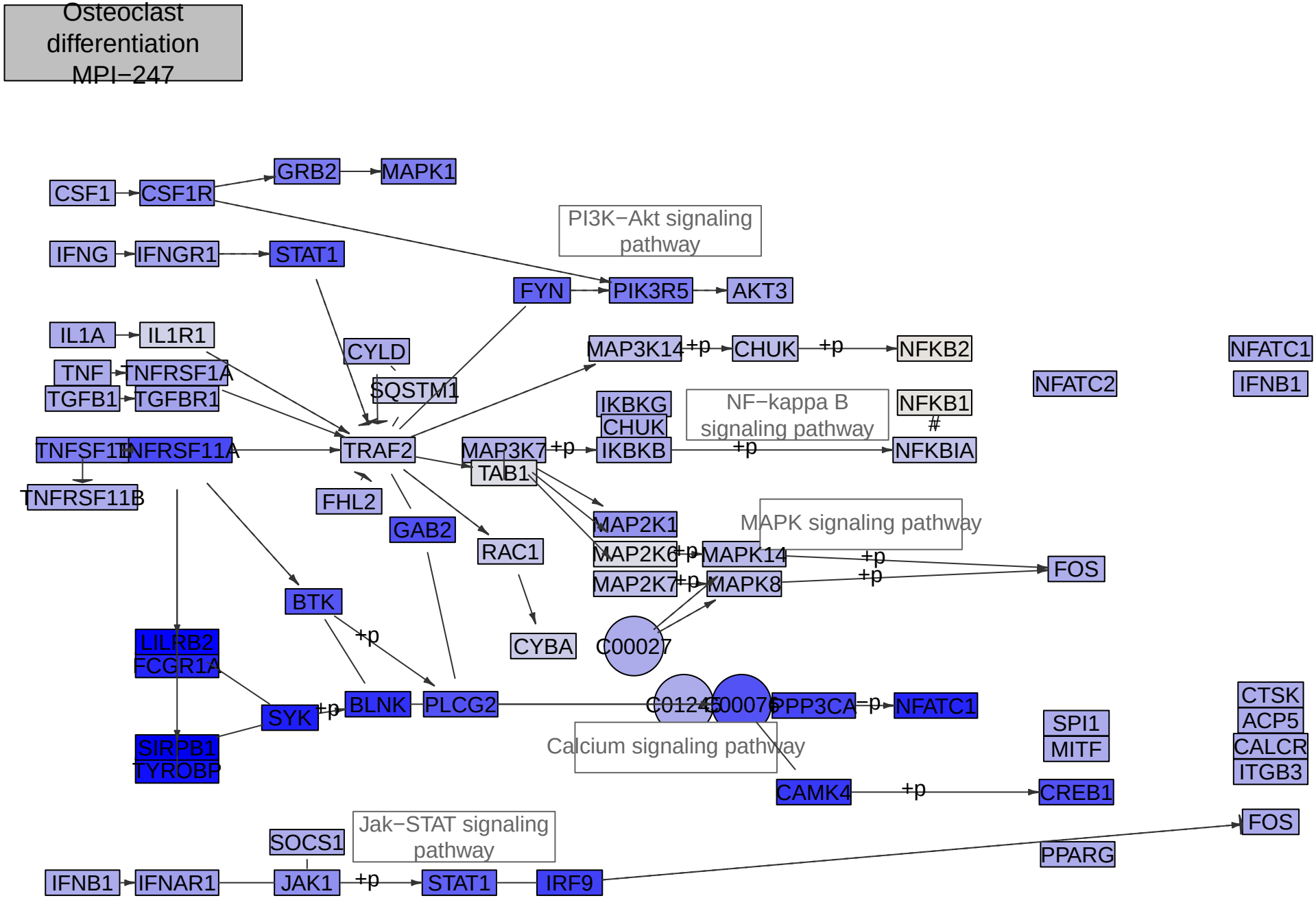
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
MAP2K1
MAPK signaling pathway
GAB2
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9
PPARG


Osteoclast differentiation MPI−247
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MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
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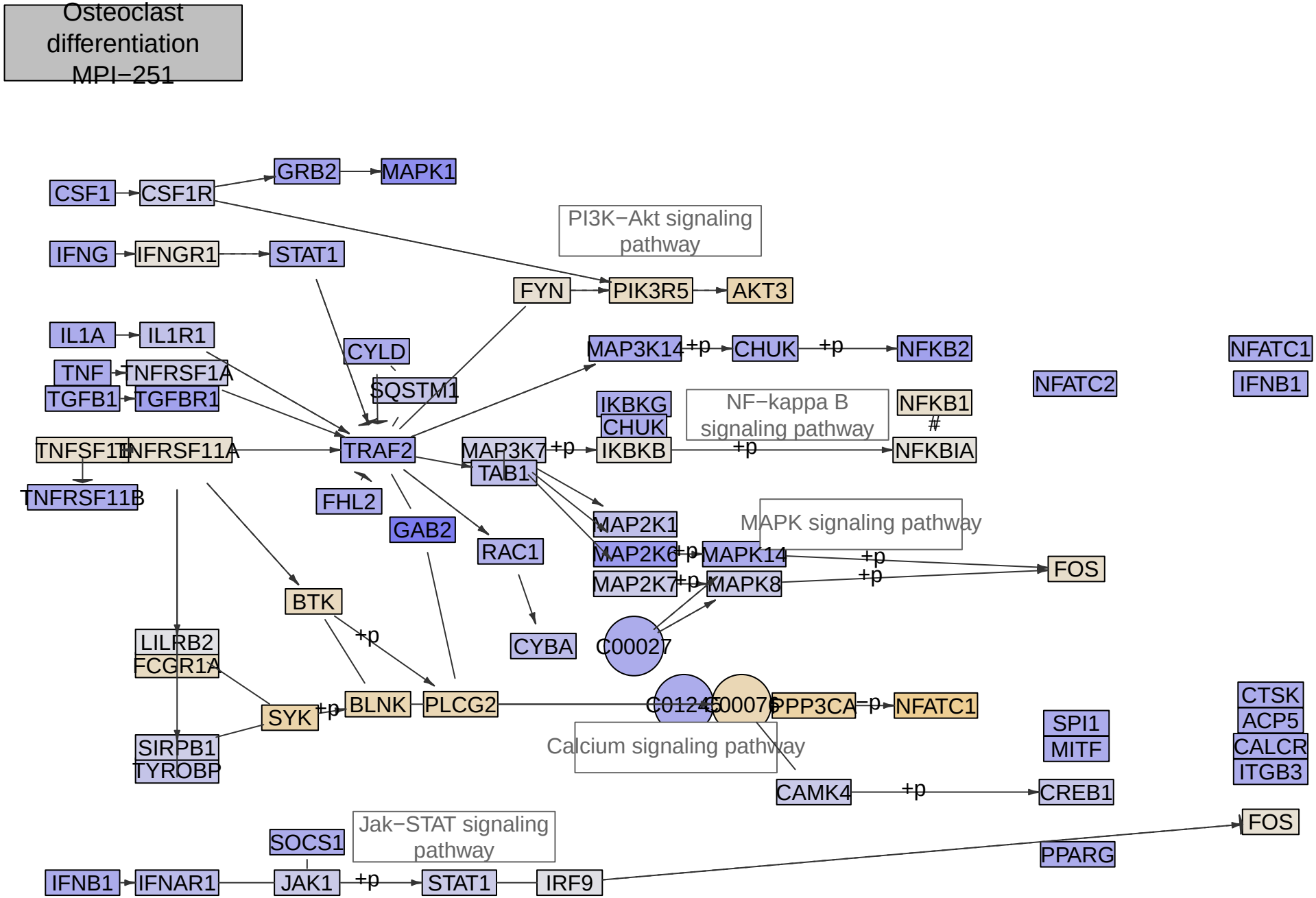
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
+p
LILRB2
FCGR1A
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
=p
NFATC1
SPI1
MITF
CTSK
ACP5
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−251
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CSF1R
PI3K−Akt signaling pathway
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IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
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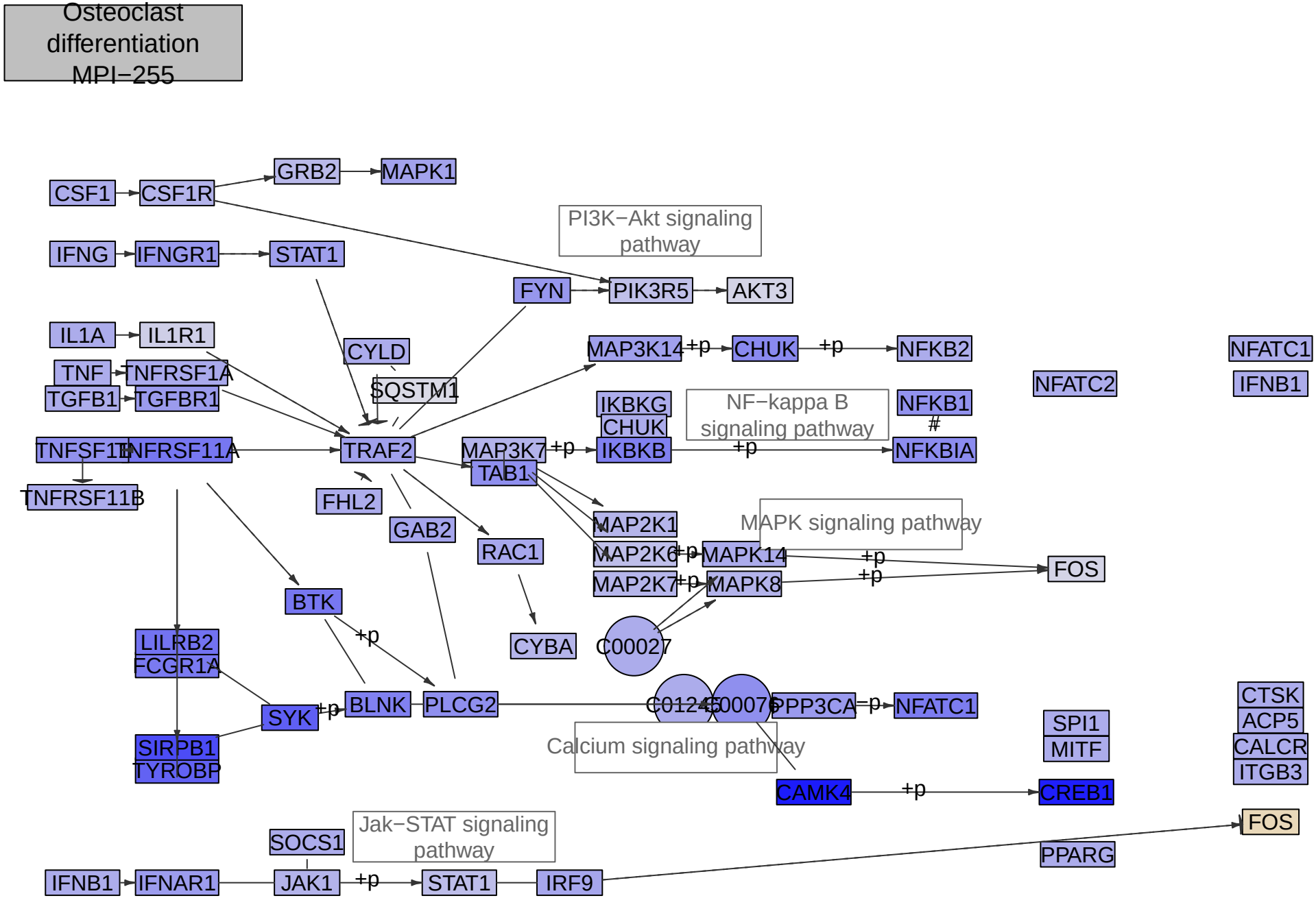
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
CTSK
ACP5
SPI1
MITF
SIRPB1
TYROBP
Calcium signaling pathway
CALCR
ITGB3
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−255
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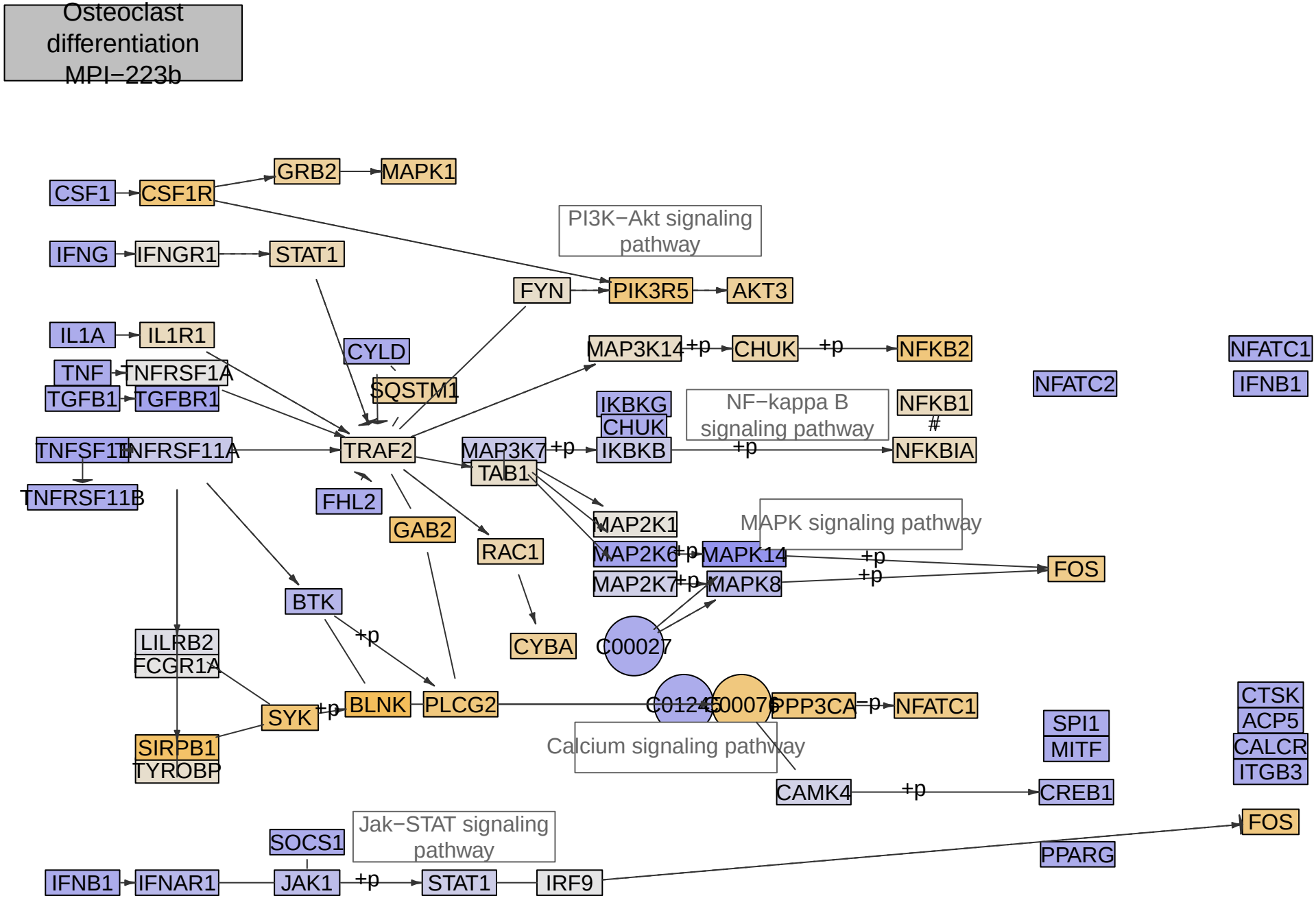
MAPK1
CSF1
CSF1R
PI3K−Akt signaling pathway
IFNG
IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
GAB2
MAP2K1
MAPK signaling pathway
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SIRPB1
TYROBP
Calcium signaling pathway
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
CAMK4
+p
CREB1
SOCS1
Jak−STAT signaling pathway
FOS
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9


Osteoclast differentiation MPI−223b
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CSF1R
PI3K−Akt signaling pathway
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IFNGR1
STAT1
FYN
PIK3R5
AKT3
IL1A
IL1R1
CYLD
MAP3K14
+p
CHUK
+p
NFKB2
NFATC1
TNF
TNFRSF1A
SQSTM1
NFATC2
IFNB1
TGFB1
TGFBR1
IKBKG
CHUK
NF−kappa B signaling pathway
NFKB1
#
TNFSF11
TNFRSF11A
TRAF2
MAP3K7
+p
IKBKB
+p
NFKBIA
TAB1
TNFRSF11B
FHL2
MAP2K1
MAPK signaling pathway
GAB2
RAC1
MAP2K6
+p
MAPK14
+p
FOS
MAP2K7
+p
MAPK8
+p
BTK
LILRB2
FCGR1A
+p
CYBA
C00027
SYK
+p
BLNK
PLCG2
C01245
C00076
PPP3CA
+p
NFATC1
SPI1
MITF
CTSK
ACP5
CALCR
ITGB3
SIRPB1
TYROBP
Calcium signaling pathway
CAMK4
+p
CREB1
FOS
SOCS1
Jak−STAT signaling pathway
PPARG
IFNB1
IFNAR1
JAK1
+p
STAT1
IRF9