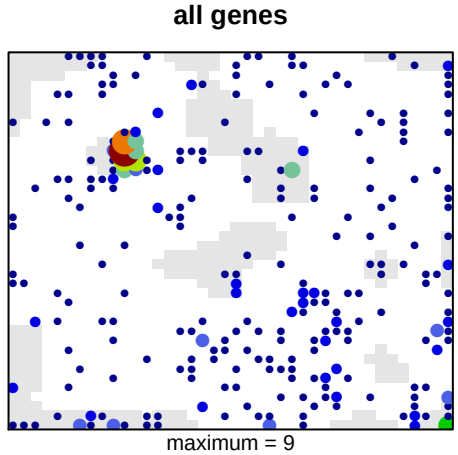
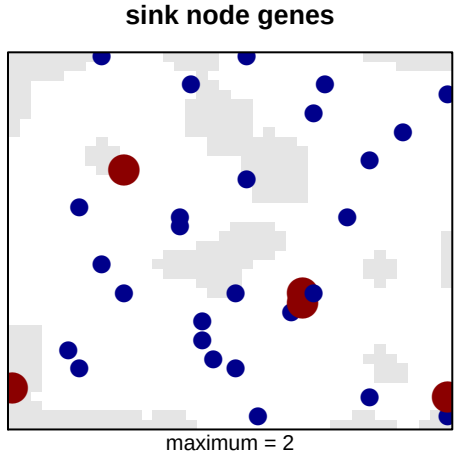
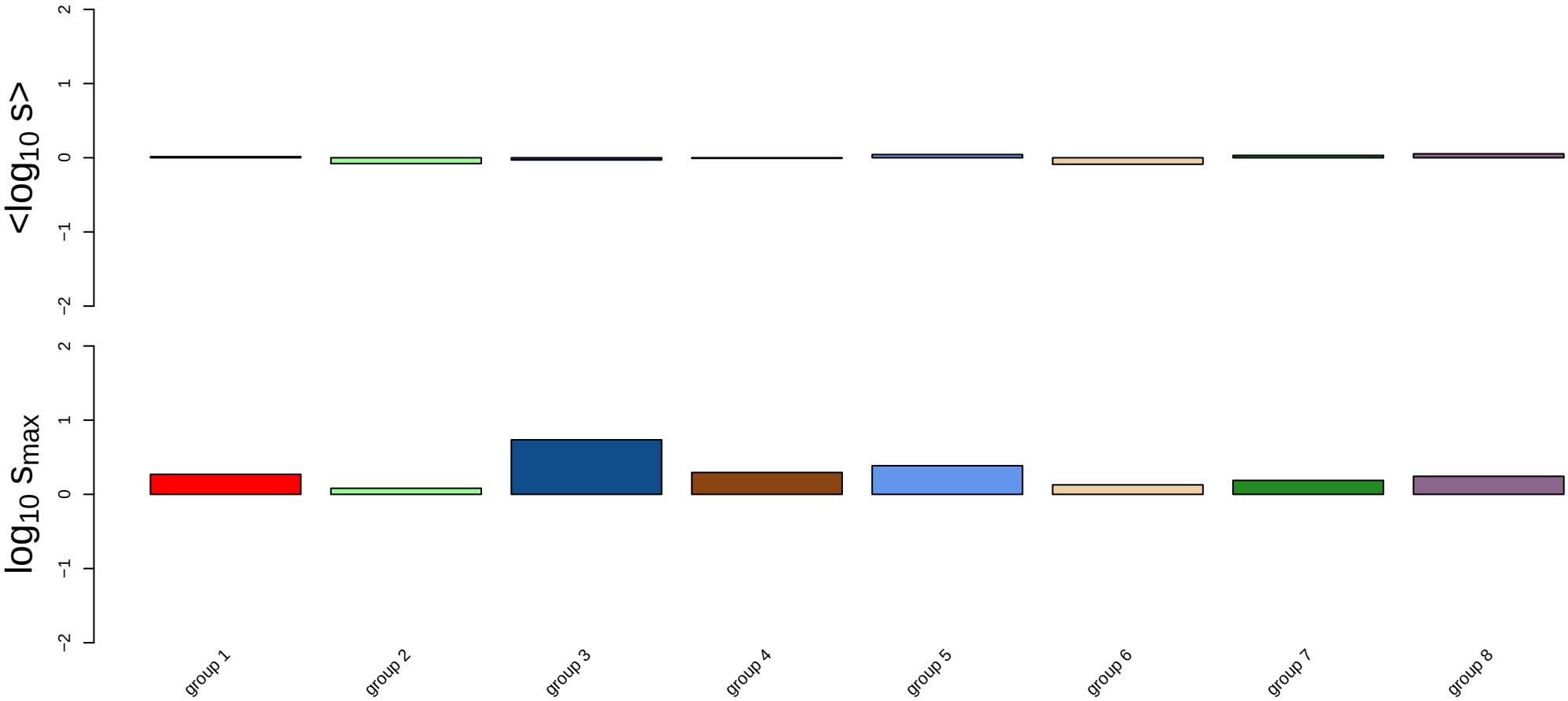
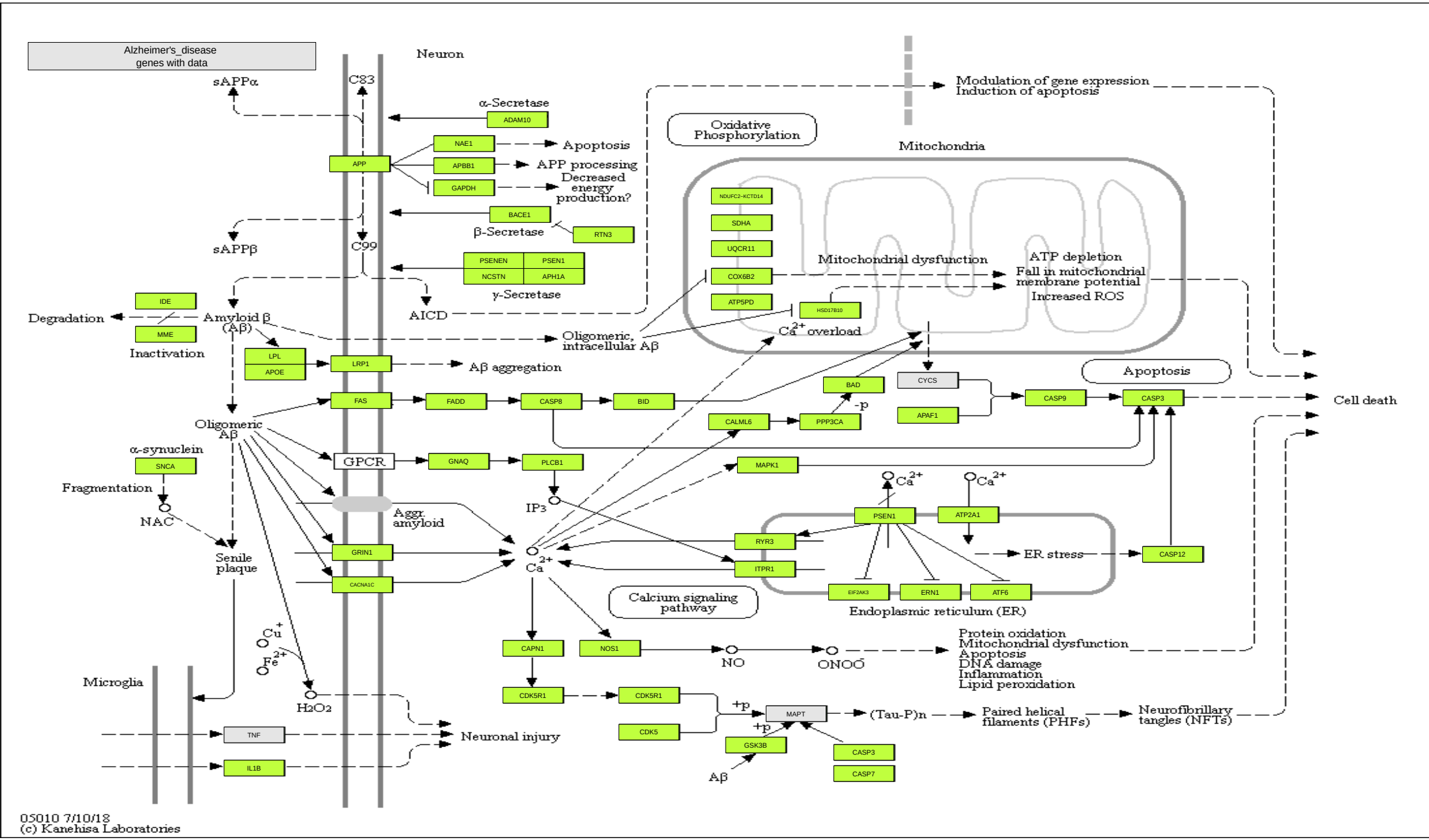
Alzheimer's disease








Alzheimer's_disease
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C83
α-Secretase
ADAM10
NAE1
Apoptosis
APP
APBB1
APP processing
GAPDH
Decreased energy production?
BACE1
β-Secretase
RTN3
sAPPβ
C99
PSENEN
PSEN1
NCSTN
APH1A
γ-Secretase
AICD
Modulation of gene expression
Induction of apoptosis
Oxidative Phosphorylation
Mitochondria
NDUFC2-KCTD14
SDHA
UQCR11
COX6B2
ATP5PD
HSD17B10
Mitochondrial dysfunction
ATP depletion
Fall in mitochondrial membrane potential
Increased ROS
Ca2+ overload
IDE
Degradation
MME
Inactivation
Amyloid β (Aβ)
Oligomeric, intracellular Aβ
LPL
APOE
LRP1
Aβ aggregation
Apoptosis
CYCS
BAD
-p
APAF1
CASP9
CASP3
Cell death
FAS
FADD
CASP8
BID
CALML6
PPP3CA
Oligomeric Aβ
α-synuclein
SNCA
GPCR
GNAQ
PLCB1
MAPK1
Fragmentation
NAC
Aggr. amyloid
IP3
Ca2+
PSEN1
ATP2A1
RYR3
ITPR1
ER stress
CASP12
Senile plaque
GRIN1
CACNA1C
Calcium signaling pathway
EIF2AK3
ERN1
ATF6
Endoplasmic reticulum (ER)
Cu+
Fe2+
CAPN1
NOS1
NO
ONOO-
Protein oxidation
Mitochondrial dysfunction
Apoptosis
DNA damage
Inflammation
Lipid peroxidation
Microglia
H2O2
CDK5R1
CDK5R1
+p
MAPT
(Tau-P)n
Paired helical filaments (PHFs)
Neurofibrillary tangles (NFTs)
TNF
Neuronal injury
CDK5
+p
GSK3B
CASP3
CASP7
IL1B
Aβ
05010 7/10/18
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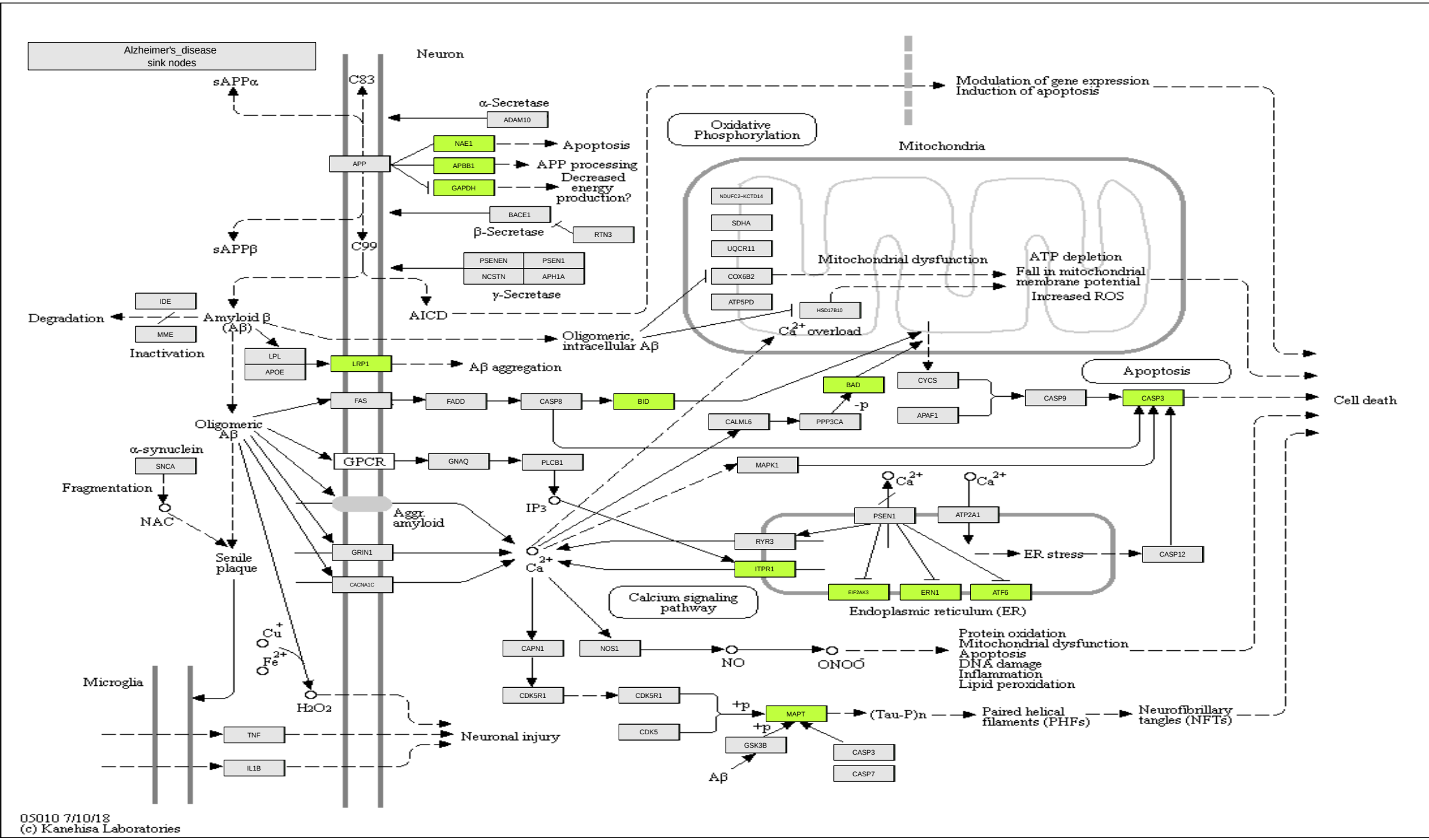
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GAPDH
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CASP7
IL1B
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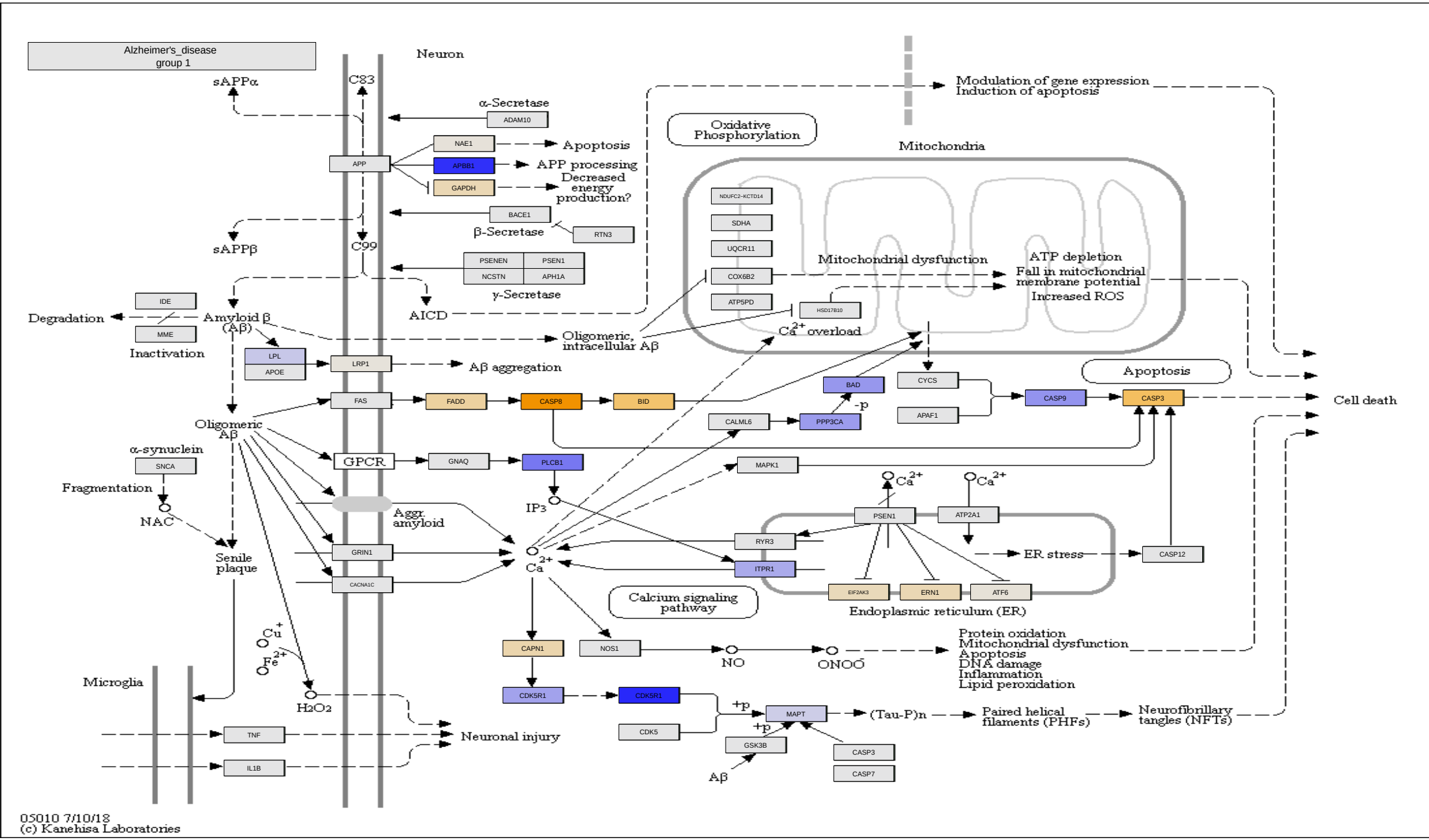
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GAPDH
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GSK3B
CASP3
CASP7
IL1B
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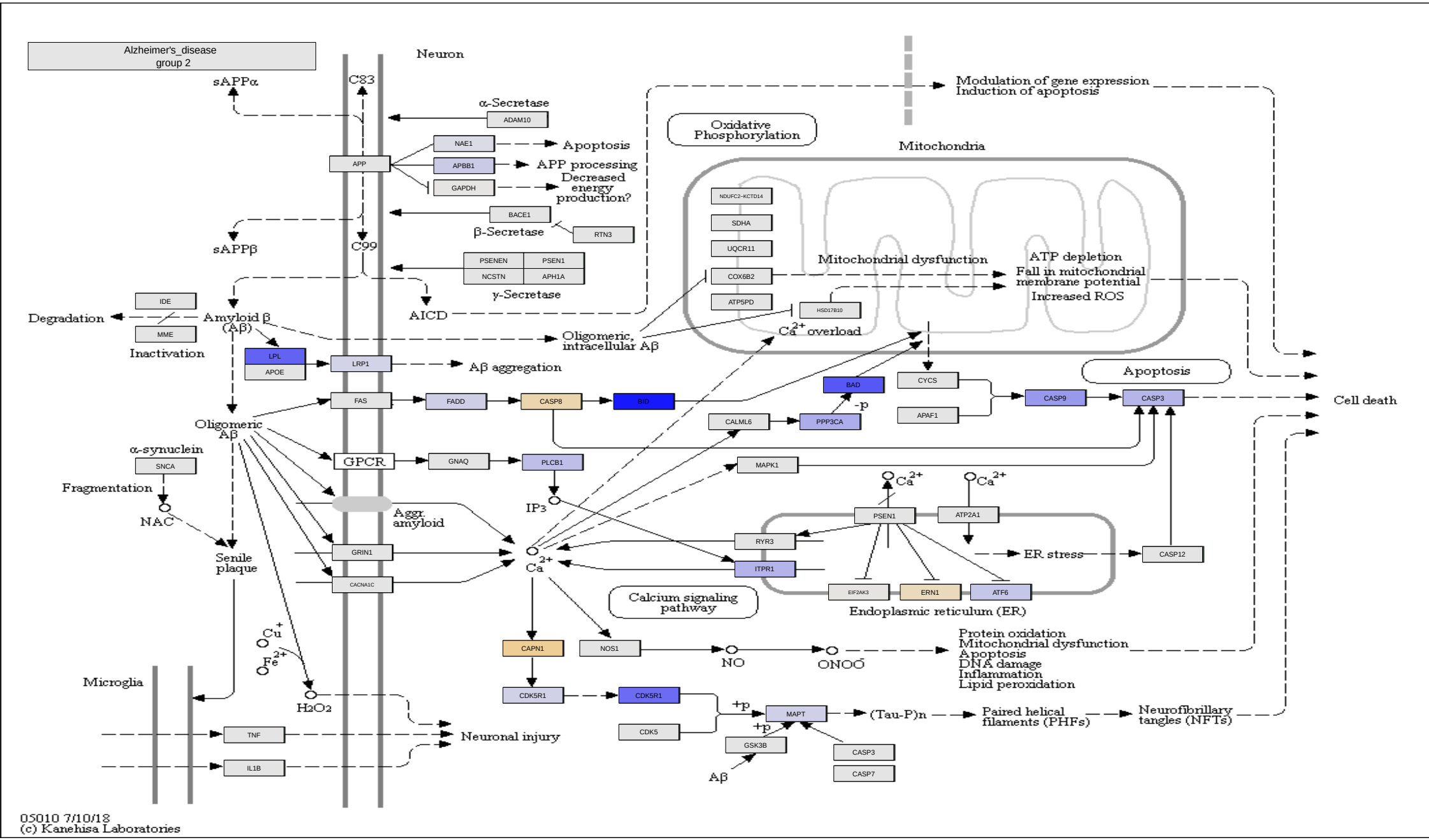
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APBB1
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GAPDH
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β-Secretase
RTN3
sAPPβ
C99
PSENEN
PSEN1
NCSTN
APH1A
γ-Secretase
AICD
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Oxidative Phosphorylation
Mitochondria
NDUFC2-KCTD14
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UQCR11
COX6B2
ATP5PD
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Apoptosis
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FADD
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APAF1
CASP9
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CALML6
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Oligomeric Aβ
α-synuclein
SNCA
GPCR
GNAQ
PLCB1
MAPK1
Fragmentation
NAC
Aggr. amyloid
IP3
Ca2+
PSEN1
ATP2A1
RYR3
ITPR1
ER stress
CASP12
Senile plaque
GRIN1
CACNA1C
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ERN1
ATF6
Endoplasmic reticulum (ER)
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Fe2+
CAPN1
NOS1
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Mitochondrial dysfunction
Apoptosis
DNA damage
Inflammation
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Microglia
H2O2
CDK5R1
CDK5R1
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MAPT
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Paired helical filaments (PHFs)
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TNF
Neuronal injury
CDK5
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GSK3B
CASP3
CASP7
IL1B
Aβ
05010 7/10/18
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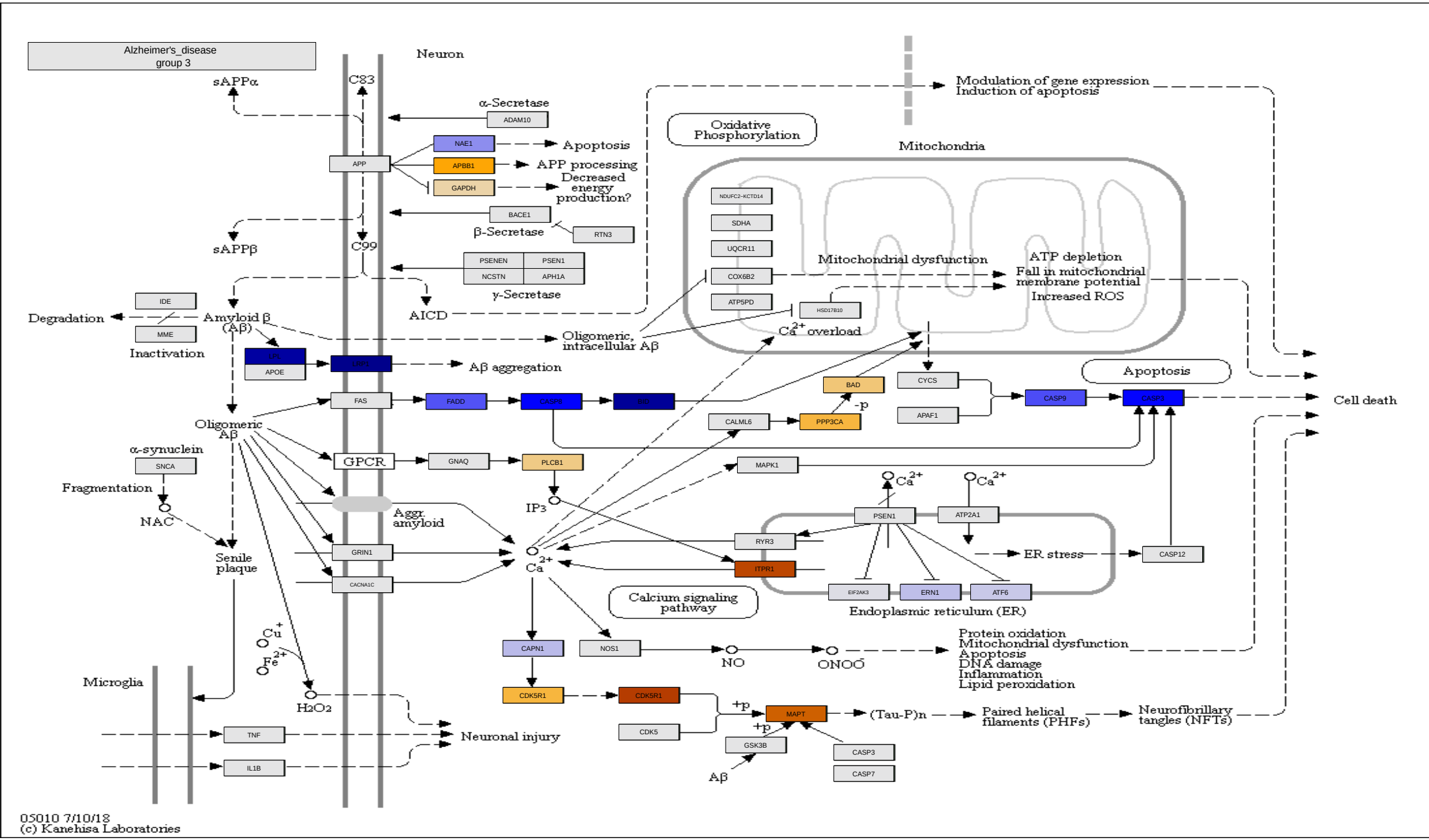
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RTN3
sAPPβ
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PSEN1
NCSTN
APH1A
γ-Secretase
AICD
Modulation of gene expression
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Oxidative Phosphorylation
Mitochondria
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SDHA
UQCR11
COX6B2
ATP5PD
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Mitochondrial dysfunction
ATP depletion
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MME
Inactivation
Amyloid β (Aβ)
Oligomeric, intracellular Aβ
LPL
APOE
LRP1
Aβ aggregation
Apoptosis
BAD
CYCS
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FADD
CASP8
BID
CASP9
CASP3
Cell death
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APAF1
CALML6
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α-synuclein
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GPCR
GNAQ
PLCB1
MAPK1
Fragmentation
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Aggr. amyloid
IP3
Ca2+
Ca2+
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ER stress
CASP12
Senile plaque
GRIN1
ITPR1
CACNA1C
Ca2+
Calcium signaling pathway
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ERN1
ATF6
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Fe2+
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NOS1
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ONOO-
Protein oxidation
Mitochondrial dysfunction
Apoptosis
DNA damage
Inflammation
Lipid peroxidation
Microglia
H2O2
CDK5R1
CDK5R1
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MAPT
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Paired helical filaments (PHFs)
Neurofibrillary tangles (NFTs)
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Neuronal injury
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CASP7
IL1B
Aβ
05010 7/10/18
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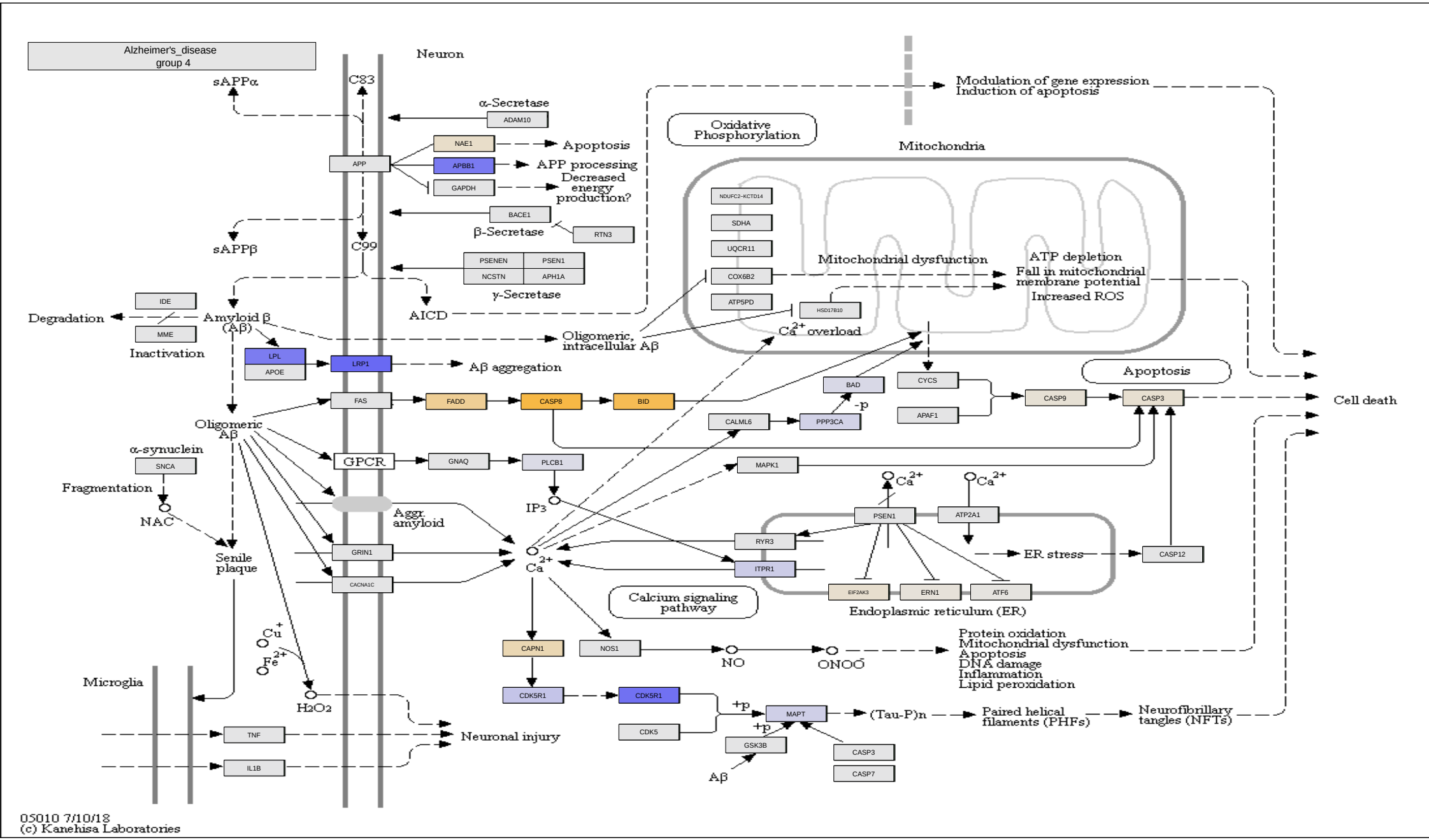
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PSEN1
NCSTN
APH1A
γ-Secretase
AICD
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Induction of apoptosis
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UQCR11
COX6B2
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Amyloid β (Aβ)
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APOE
LRP1
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CASP3
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Protein oxidation
Mitochondrial dysfunction
Apoptosis
DNA damage
Inflammation
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Microglia
H2O2
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Paired helical filaments (PHFs)
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TNF
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CASP7
IL1B
Aβ
05010 7/10/18
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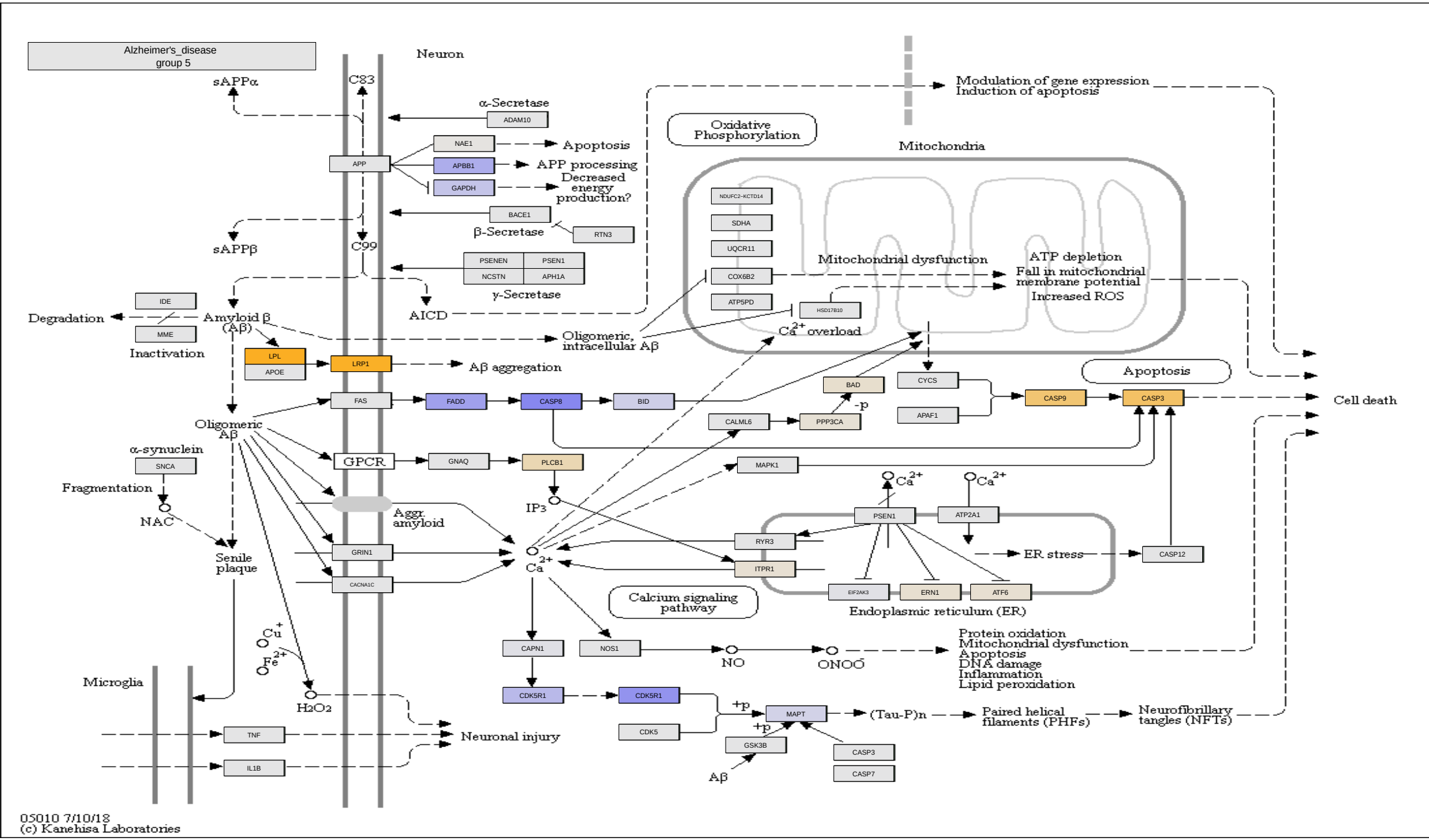
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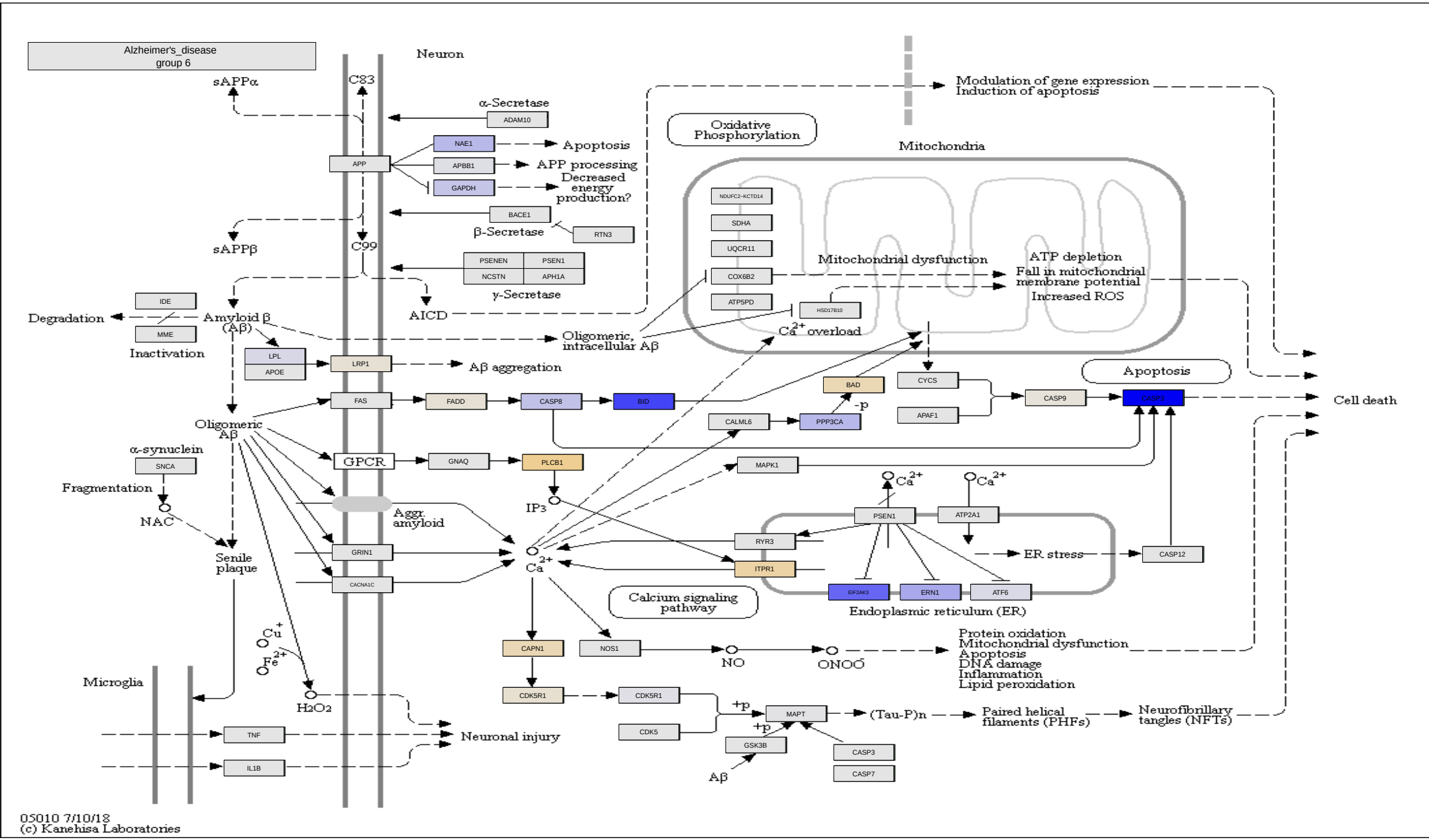
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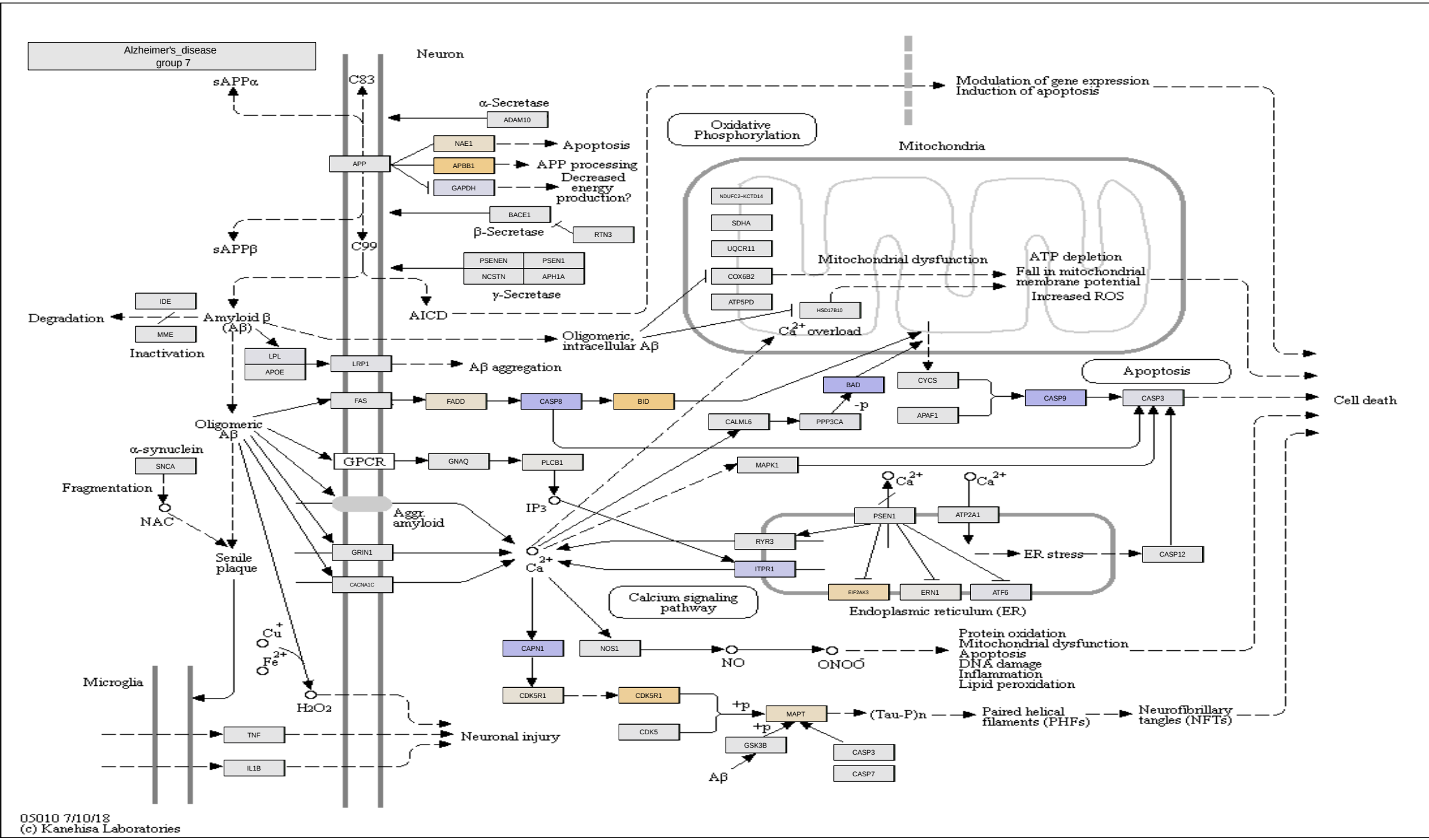
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05010 7/10/18
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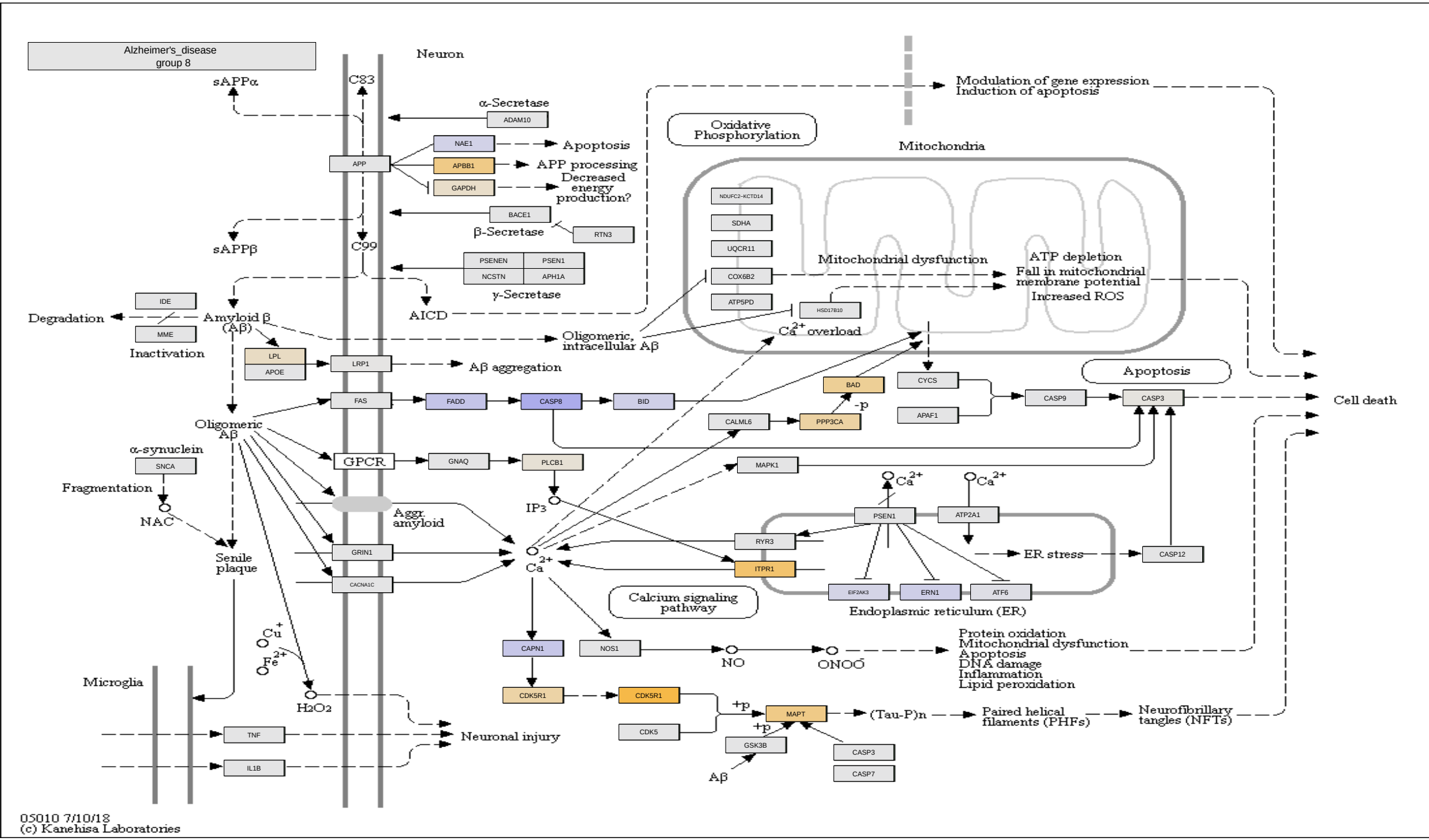
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ERN1
ATF6
Endoplasmic reticulum (ER)
Cu+
Fe2+
CAPN1
NOS1
NO
ONOO-
Protein oxidation
Mitochondrial dysfunction
Apoptosis
DNA damage
Inflammation
Lipid peroxidation
Microglia
H2O2
CDK5R1
CDK5R1
+p
MAPT
(Tau-P)n
Paired helical filaments (PHFs)
Neurofibrillary tangles (NFTs)
TNF
Neuronal injury
CDK5
+p
GSK3B
CASP3
CASP7
IL1B
Aβ
05010 7/10/18
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