

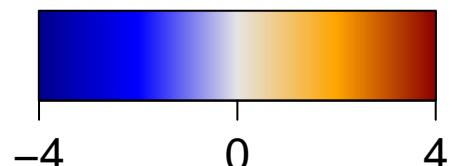
GSZ score

Category Aging

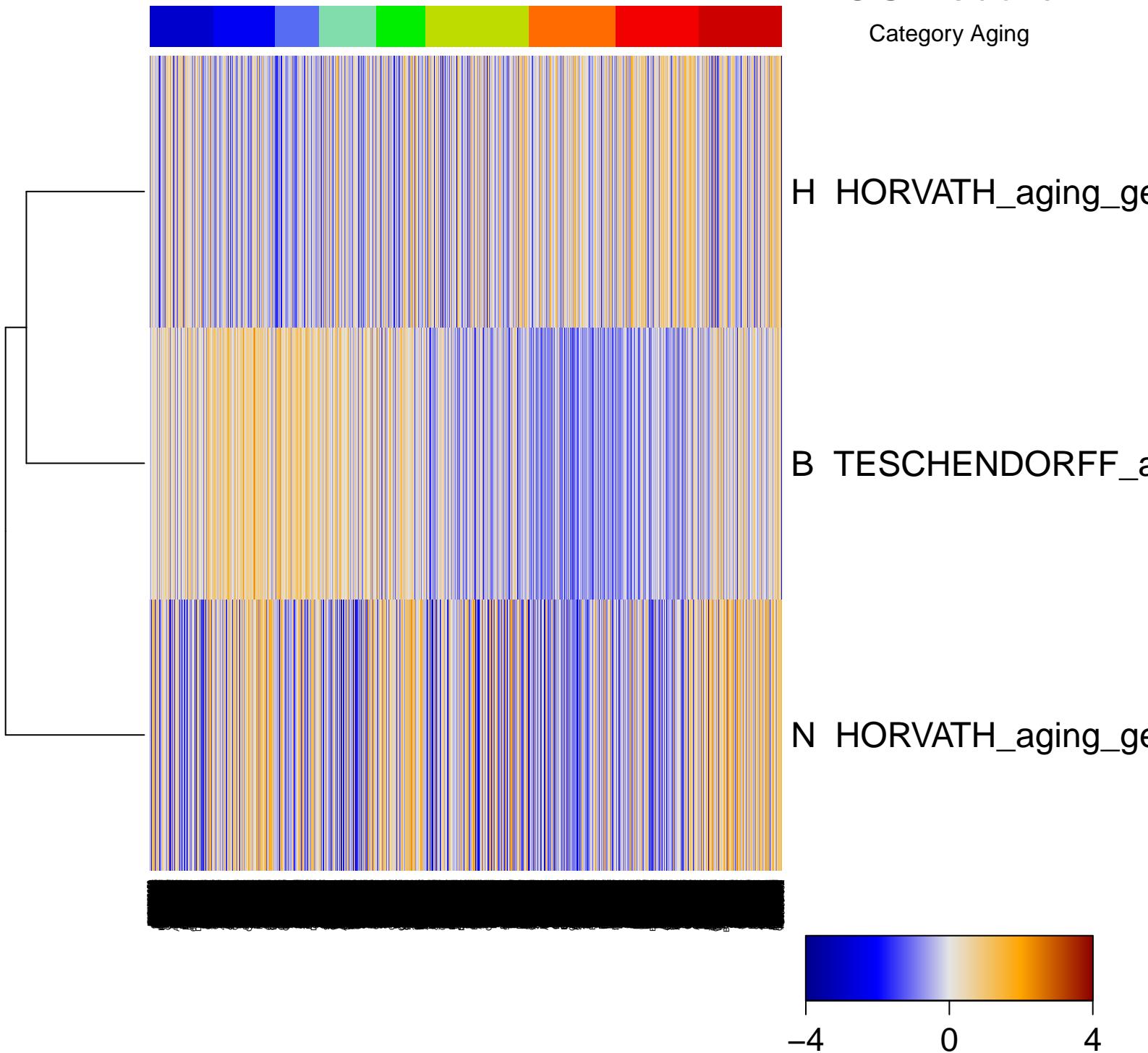
H HORVATH\_aging\_gen

B TESCHENDORFF\_aging

N HORVATH\_aging\_gen

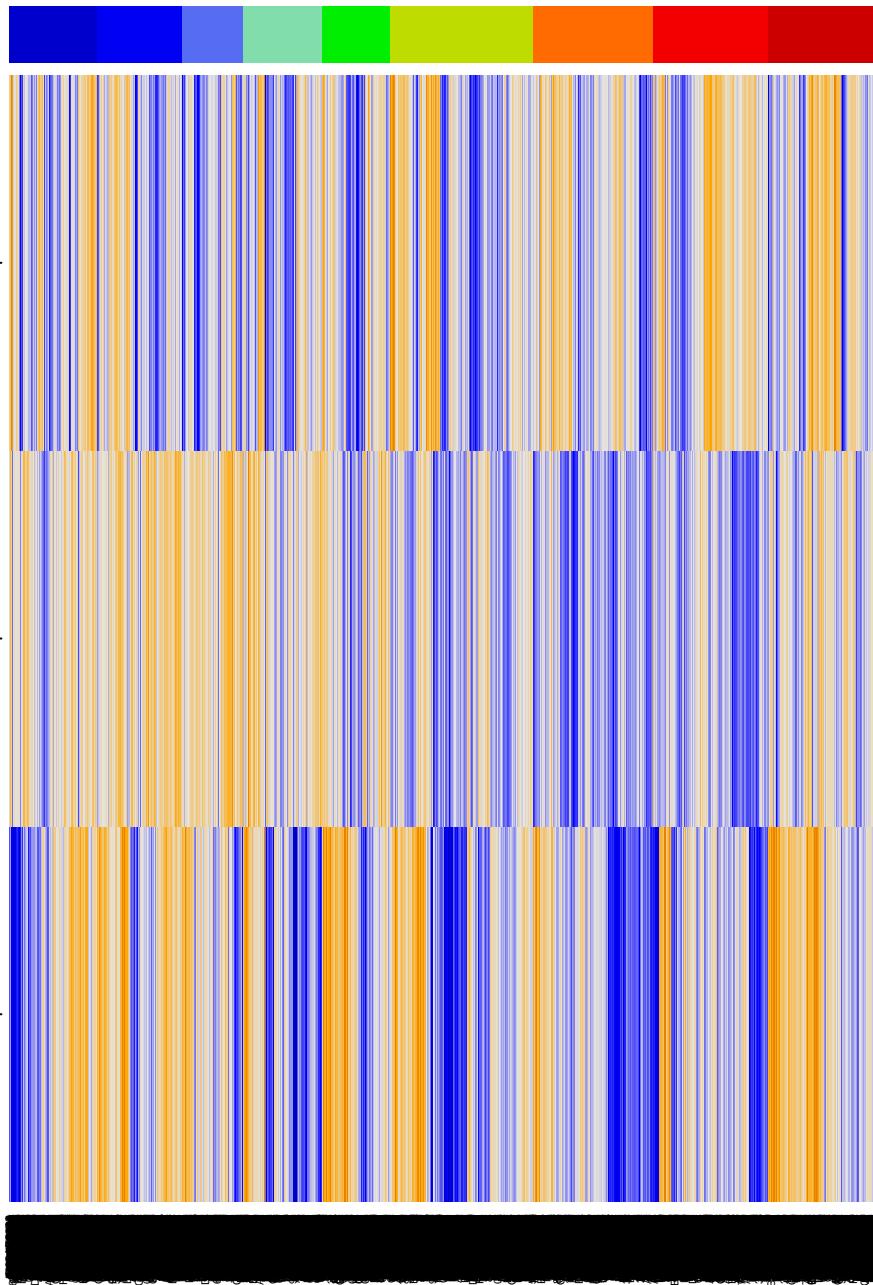


GSZ score  
Category Aging



# GSZ score

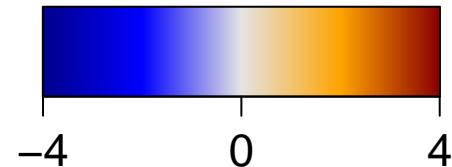
Category Aging

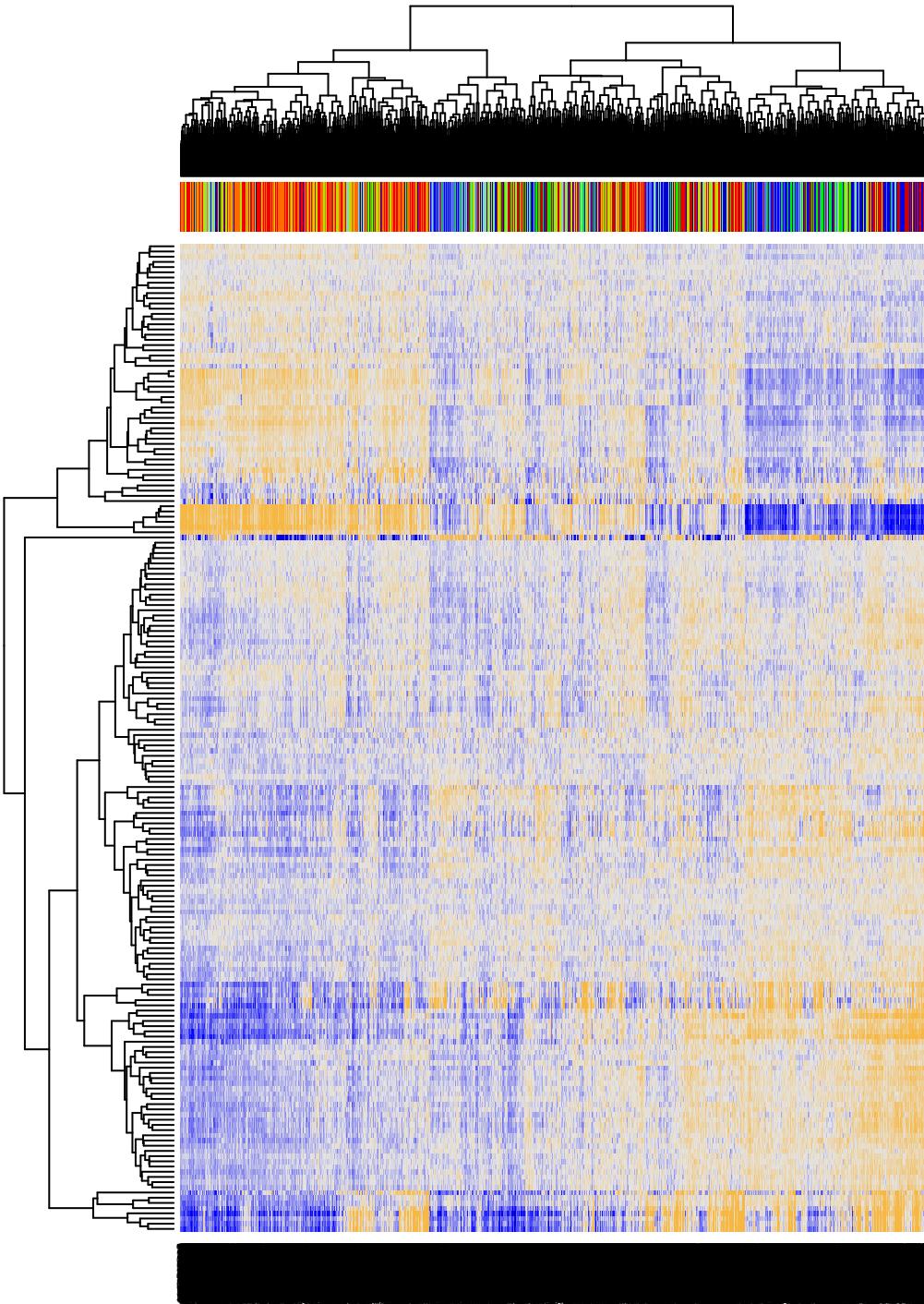


H HORVATH\_aging\_gen

B TESCHENDORFF\_aging\_gen

N HORVATH\_aging\_gen

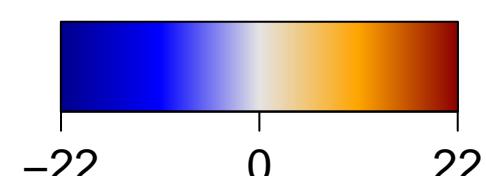




# GSZ score

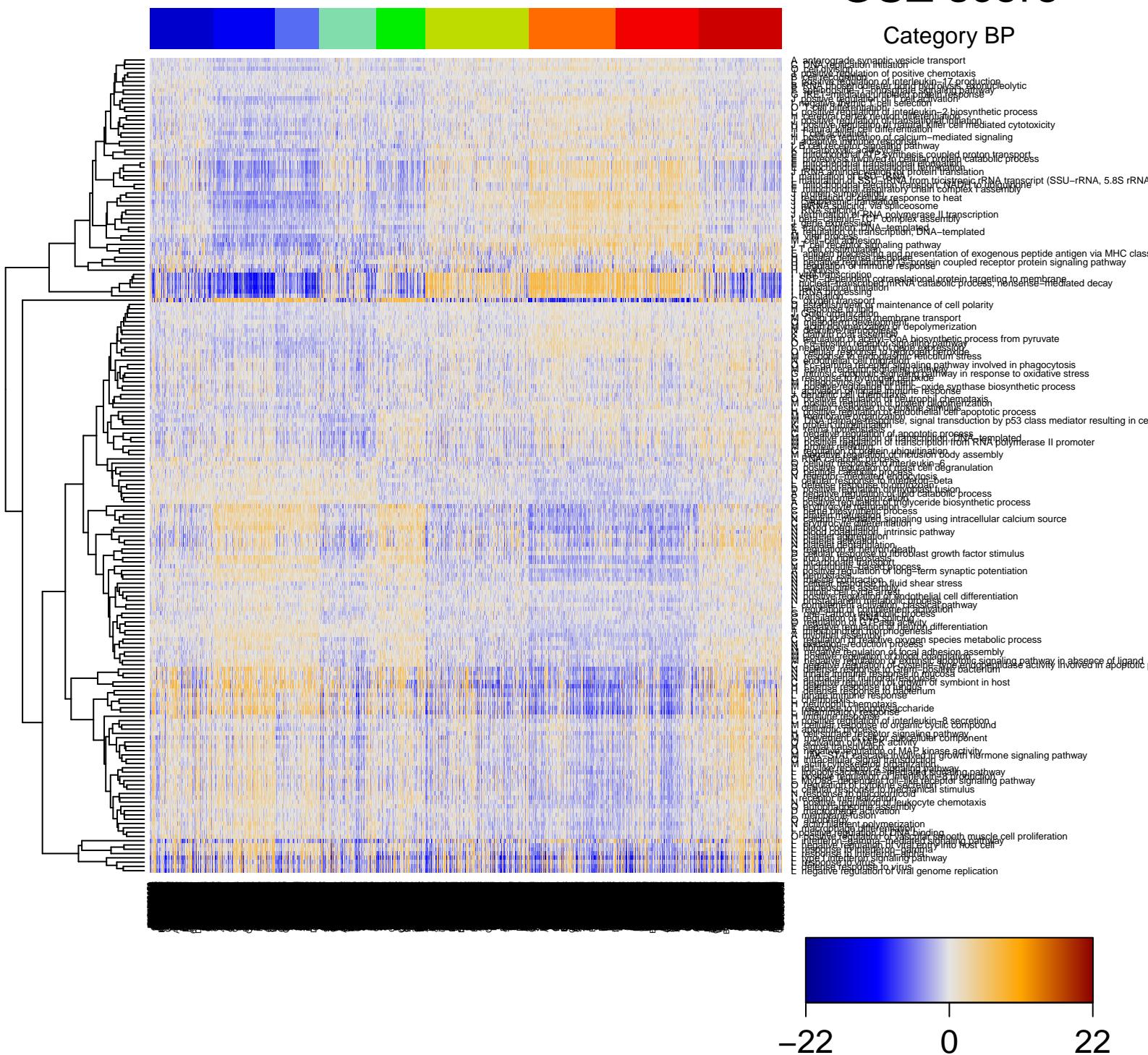
## Category BP

A proteoglycan synaptosomal vesicle transport  
positive regulation of positive chemotaxis  
equation regulation of phorbol ester production  
negative regulation of protein kinase C dependent response  
negative regulation of cell selection  
positive regulation of glutathione biosynthetic process  
positive regulation of extracellular cell mediated cytotoxicity  
positive regulation of calcium-mediated signaling  
beta-1 receptor signaling pathway  
prostaglandin F2alpha/PGE2/cGMP/cGMP-dependent metabolic process  
beta-1 receptor/transmembrane receptor signal transduction  
maturation of 5S rRNA from tricistronic rRNA transcript (SSU-rRNA, 5.8S rRNA, LSU)  
mitochondrial respiratory chain complex I assembly  
heat shock response  
positive regulation of RNA polymerase II transcription  
beta-1 integrin-mediated response to heat  
positive regulation of transcription-DNA-templated  
T cell receptor signaling pathway  
peptide processing and presentation of exogenous peptide antigen via MHC class II  
negative regulation of immune response coupled receptor protein signaling pathway  
gene transcription contrarian protein targeting to membrane  
protein catabolic process  
transmembrane transport  
establishment or maintenance of cell polarity  
GDP/GTP exchange on membrane transport  
actin filament polymerization or depolymerization  
catalysis of acetyl-CoA biosynthetic process from pyruvate  
negative regulation of basic leucine zipper protein process  
exosome, endosome, acidic endosome process  
ethanolamine kinase-mediated pathway involved in phagocytosis  
ethanolamine kinase-mediated pathway in response to oxidative stress  
response to hypoxia via nitric oxide synthase biosynthetic process  
activation of gamma interferon response  
positive regulation of neutrophil chemotaxis  
positive regulation of extracellular cell apoptotic process  
DNA damage response, signal transduction by p53 class mediator resulting in cell cycle  
negative regulation of apoptosis process  
positive regulation of transcription from RNA polymerase II promoter  
negative regulation of transcription-DNA-templated  
cellular response to heterophilic granulation  
negative regulation of endocytosis  
beta defense response to heterophilic granulation  
carnitine palmitoyl transferase catalytic process  
ethanolamine kinase-mediated biosynthetic process  
protein methylation signaling using intracellular calcium source  
blood coagulation, intrinsic pathway  
platelet aggregation  
beta-1 receptor signaling  
beta-1 receptor activation by fibroblast growth factor stimulus  
hypoxia response  
positive regulation of long-term synaptic potentiation  
force reduction, fluid shear stress  
positive regulation of cell adhesion assembly  
positive regulation of apical ectodermal cell differentiation  
positive regulation of heterotypic protein-EF5 pathway  
negative regulation of protein phosphorylation  
regulation of G1 phase aligned differentiation  
positive regulation of oxygen species metabolic process  
oxidative reduction process  
positive regulation of focal adhesion assembly  
positive regulation of adhesion-dependent signaling pathway in absence of ligand  
negative regulation of caspase-3-like endonuclease activity involved in apoptotic process  
positive regulation of gene expression in eukaryote  
defense response to pathogen or symbiont in host  
defense response to pathogen or symbiont  
chitosan binding response  
responsible for lactose/sugars carbohydrate  
positive regulation of interleukin-8 secretion  
adenosine triphosphate or organic cyclic compound  
movement or level of substrate or component  
negative regulation of MAP kinase activity  
intracellular signal transduction  
hedgehog-like peptide steroid/thiol signaling pathway  
negative regulation of G-protein coupled receptor signaling pathway  
regulation of gene expression by microbial stimulus  
positive regulation of leukocyte chemotaxis  
membrane fusion  
actin filament polymerization  
positive regulation of cell spreading  
negative regulation of smooth muscle cell proliferation  
negative regulation of protein import into host cell  
response to protein import pathway  
helicase response to viral genome replication



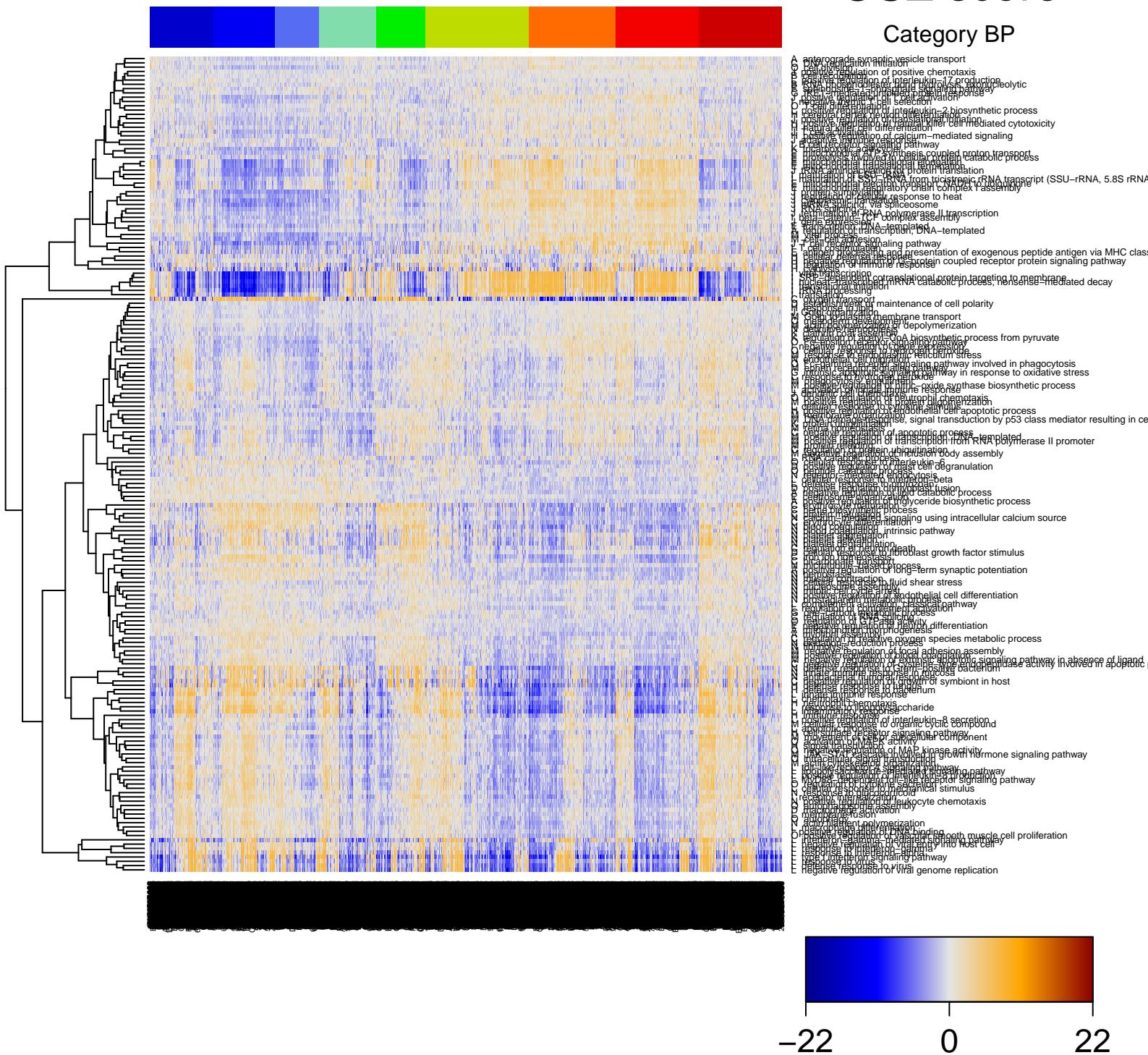
# GSZ score

## Category BP



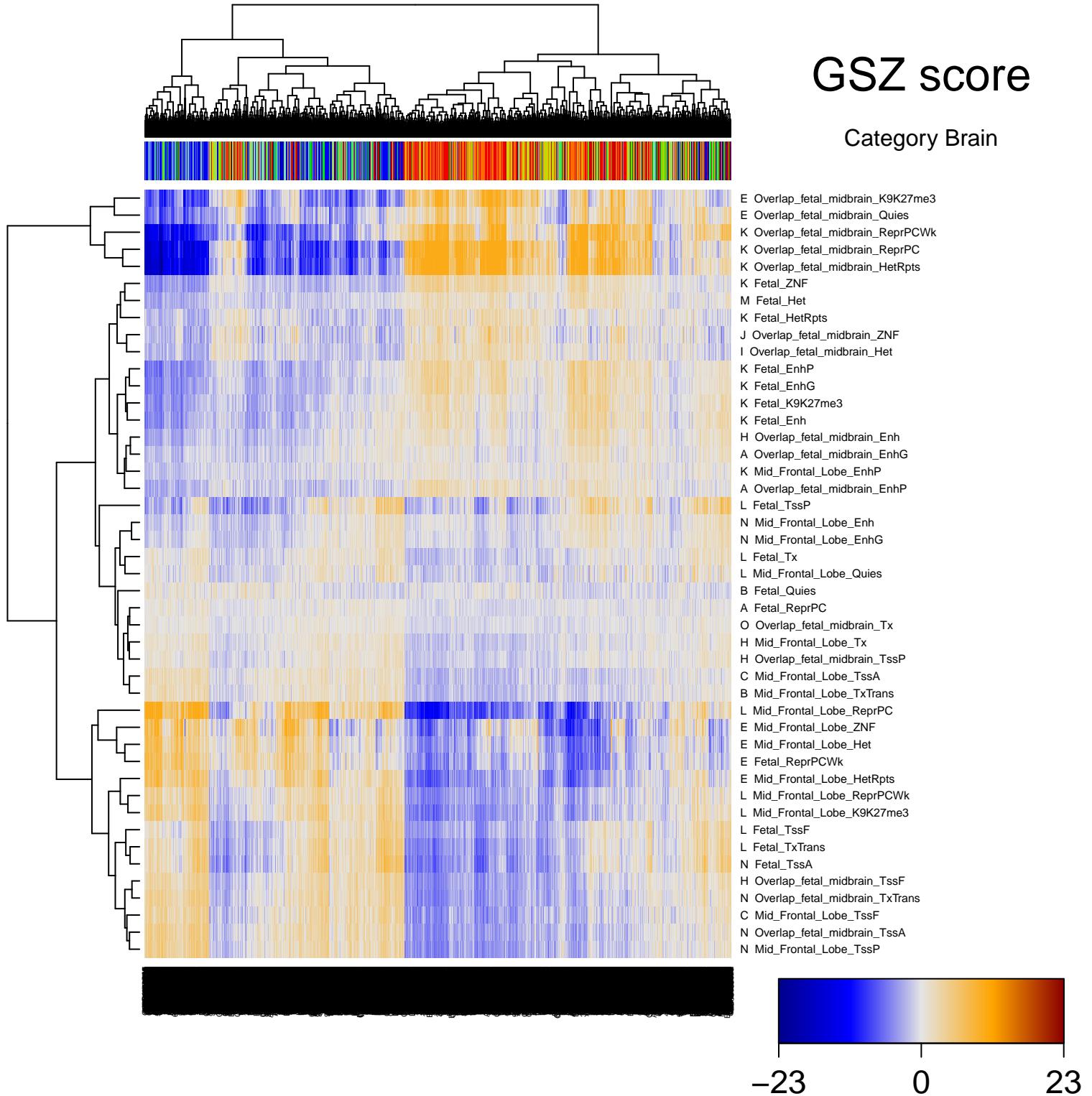
# GSZ score

## Category BP



# GSZ score

Category Brain



# GSZ score

Category Brain

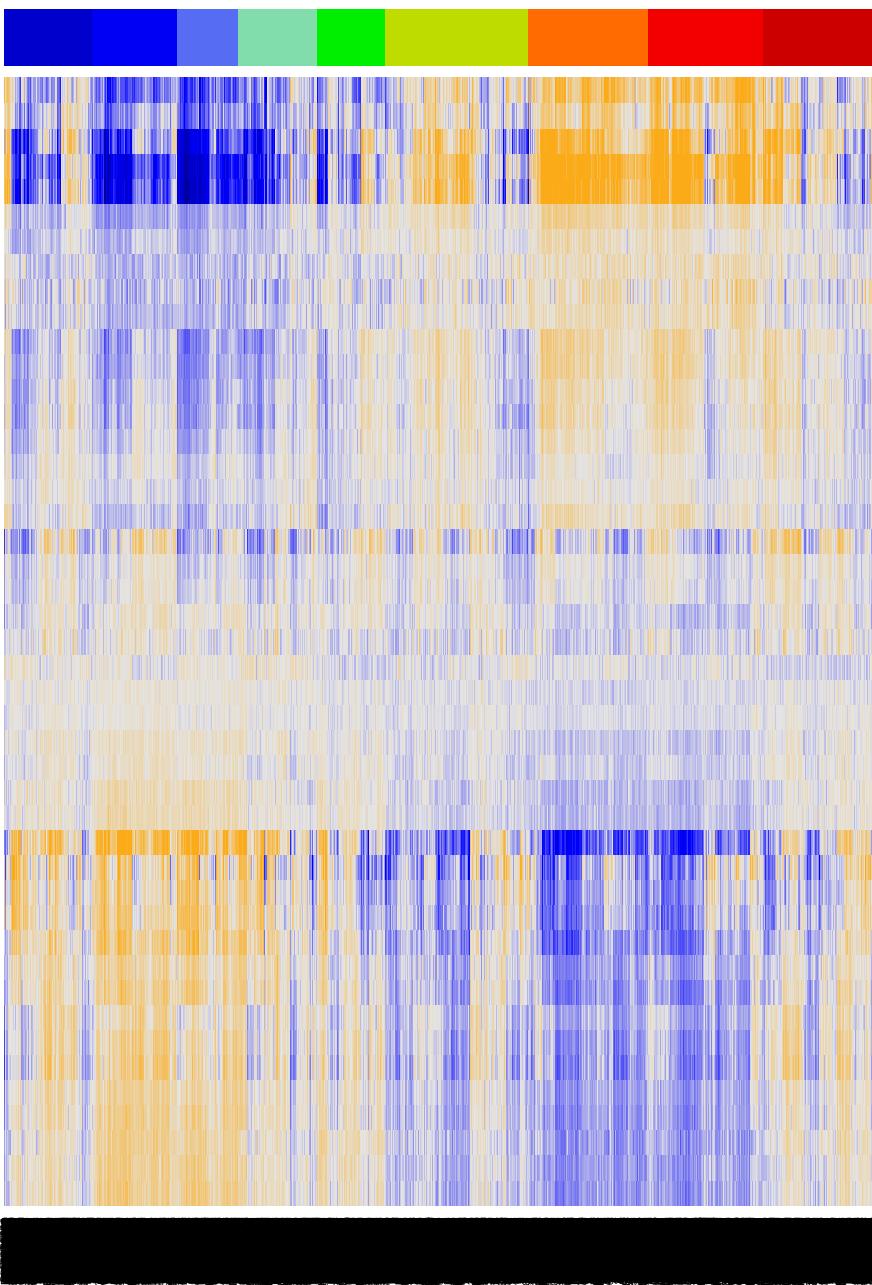
E Overlap\_fetal\_midbrain\_K9K27me3  
E Overlap\_fetal\_midbrain\_Quies  
K Overlap\_fetal\_midbrain\_ReprPCWk  
K Overlap\_fetal\_midbrain\_ReprPC  
K Overlap\_fetal\_midbrain\_HetRpts  
K Fetal\_ZNF  
M Fetal\_Het  
K Fetal\_HetRpts  
J Overlap\_fetal\_midbrain\_ZNF  
I Overlap\_fetal\_midbrain\_Het  
K Fetal\_EnhP  
K Fetal\_EnhG  
K Fetal\_K9K27me3  
K Fetal\_Enh  
H Overlap\_fetal\_midbrain\_Enh  
A Overlap\_fetal\_midbrain\_EnhG  
K Mid\_Frontal\_Lobe\_EnhP  
A Overlap\_fetal\_midbrain\_EnhP  
L Fetal\_TssP  
N Mid\_Frontal\_Lobe\_Enh  
N Mid\_Frontal\_Lobe\_EnhG  
L Fetal\_Tx  
L Mid\_Frontal\_Lobe\_Quies  
B Fetal\_Quies  
A Fetal\_ReprPC  
O Overlap\_fetal\_midbrain\_Tx  
H Mid\_Frontal\_Lobe\_Tx  
H Overlap\_fetal\_midbrain\_TssP  
C Mid\_Frontal\_Lobe\_TssA  
B Mid\_Frontal\_Lobe\_TxTrans  
L Mid\_Frontal\_Lobe\_ReprPC  
E Mid\_Frontal\_Lobe\_ZNF  
E Mid\_Frontal\_Lobe\_Het  
E Fetal\_ReprPCWk  
E Mid\_Frontal\_Lobe\_HetRpts  
L Mid\_Frontal\_Lobe\_ReprPCWk  
L Mid\_Frontal\_Lobe\_K9K27me3  
L Fetal\_TssF  
L Fetal\_TxTrans  
N Fetal\_TssA  
H Overlap\_fetal\_midbrain\_TssF  
N Overlap\_fetal\_midbrain\_TxTrans  
C Mid\_Frontal\_Lobe\_TssF  
N Overlap\_fetal\_midbrain\_TssA  
N Mid\_Frontal\_Lobe\_TssP

-23 0 23

# GSZ score

Category Brain

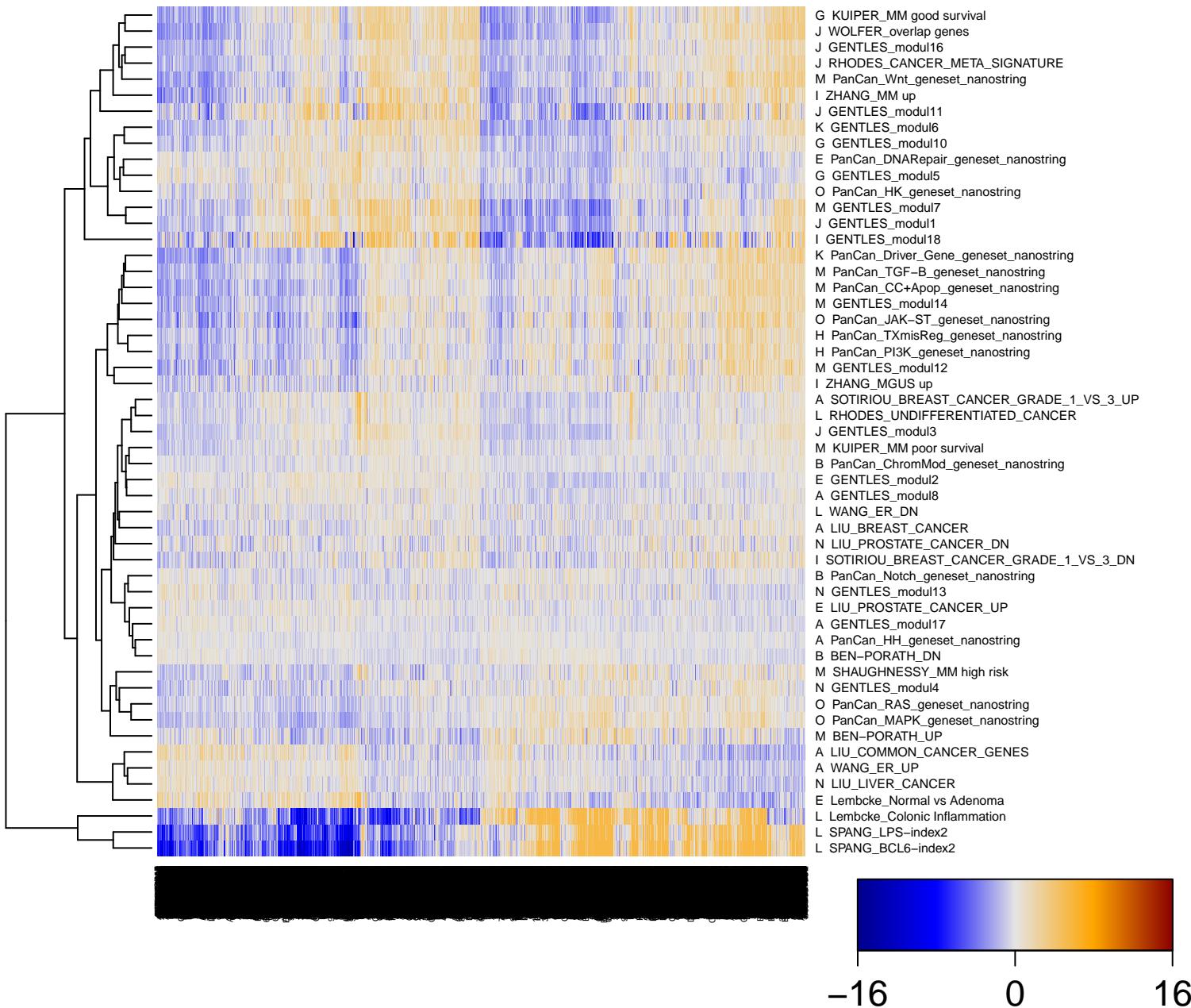
- E Overlap\_fetal\_midbrain\_K9K27me3
- E Overlap\_fetal\_midbrain\_Quies
- K Overlap\_fetal\_midbrain\_ReprPCWk
- K Overlap\_fetal\_midbrain\_ReprPC
- K Overlap\_fetal\_midbrain\_HetRpts
- K Fetal\_ZNF
- M Fetal\_Het
- K Fetal\_HetRpts
- J Overlap\_fetal\_midbrain\_ZNF
- I Overlap\_fetal\_midbrain\_Het
- K Fetal\_EnhP
- K Fetal\_EnhG
- K Fetal\_K9K27me3
- K Fetal\_Enh
- H Overlap\_fetal\_midbrain\_Enh
- A Overlap\_fetal\_midbrain\_EnhG
- K Mid\_Frontal\_Lobe\_EnhP
- A Overlap\_fetal\_midbrain\_EnhP
- L Fetal\_TssP
- N Mid\_Frontal\_Lobe\_Enh
- N Mid\_Frontal\_Lobe\_EnhG
- L Fetal\_Tx
- L Mid\_Frontal\_Lobe\_Quires
- B Fetal\_Quires
- A Fetal\_ReprPC
- O Overlap\_fetal\_midbrain\_Tx
- H Mid\_Frontal\_Lobe\_Tx
- H Overlap\_fetal\_midbrain\_TssP
- C Mid\_Frontal\_Lobe\_TssA
- B Mid\_Frontal\_Lobe\_TxTrans
- L Mid\_Frontal\_Lobe\_ReprPC
- E Mid\_Frontal\_Lobe\_ZNF
- E Mid\_Frontal\_Lobe\_Het
- E Fetal\_ReprPCWk
- E Mid\_Frontal\_Lobe\_HetRpts
- L Mid\_Frontal\_Lobe\_ReprPCWk
- L Mid\_Frontal\_Lobe\_K9K27me3
- L Fetal\_TssF
- L Fetal\_TxTrans
- N Fetal\_TssA
- H Overlap\_fetal\_midbrain\_TssF
- N Overlap\_fetal\_midbrain\_TxTrans
- C Mid\_Frontal\_Lobe\_TssF
- N Overlap\_fetal\_midbrain\_TssA
- N Mid\_Frontal\_Lobe\_TssP



-23 0 23

# GSZ score

Category Cancer



# GSZ score

Category Cancer

- G KUIPER\_MM good survival  
J WOLFER\_overlap genes  
J GENTLES\_modul16  
J RHODES\_CANCER\_META\_SIGNATURE  
M PanCan\_Wnt\_geneset\_nanostring  
I ZHANG\_MM up  
J GENTLES\_modul11  
K GENTLES\_modul6  
G GENTLES\_modul10  
E PanCan\_DNARepair\_geneset\_nanostring  
G GENTLES\_modul5  
O PanCan\_HK\_geneset\_nanostring  
M GENTLES\_modul7  
J GENTLES\_modul1  
I GENTLES\_modul18  
K PanCan\_Driver\_Gene\_geneset\_nanostring  
M PanCan\_TGF-B\_geneset\_nanostring  
M PanCan\_CC+Apopt\_geneset\_nanostring  
M GENTLES\_modul14  
O PanCan\_JAK-ST\_geneset\_nanostring  
H PanCan\_TXmisReg\_geneset\_nanostring  
H PanCan\_PI3K\_geneset\_nanostring  
M GENTLES\_modul12  
I ZHANG\_MGUS up  
A SOTIRIOU\_BREAST\_CANCER\_GRADE\_1\_VS\_3\_UP  
L RHODES\_UNDIFFERENTIATED\_CANCER  
J GENTLES\_modul3  
M KUIPER\_MM poor survival  
B PanCan\_ChromMod\_geneset\_nanostring  
E GENTLES\_modul2  
A GENTLES\_modul8  
L WANG\_ER\_DN  
A LIU\_BREAST\_CANCER  
N LIU\_PROSTATE\_CANCER\_DN  
I SOTIRIOU\_BREAST\_CANCER\_GRADE\_1\_VS\_3\_DN  
B PanCan\_Notch\_geneset\_nanostring  
N GENTLES\_modul13  
E LIU\_PROSTATE\_CANCER\_UP  
A GENTLES\_modul17  
A PanCan\_HH\_geneset\_nanostring  
B BEN-PORATH\_DN  
M SHAUGHNESSY\_MM high risk  
N GENTLES\_modul4  
O PanCan\_RAS\_geneset\_nanostring  
O PanCan\_MAPK\_geneset\_nanostring  
M BEN-PORATH\_UP  
A LIU\_COMMON\_CANCER\_GENES  
A WANG\_ER\_UP  
N LIU\_LIVER\_CANCER  
E Lembcke\_Normal vs Adenoma  
L Lembcke\_Colonic Inflammation  
L SPANG\_LPS-index2  
L SPANG\_BCL6-index2

-16 0 16

# GSZ score

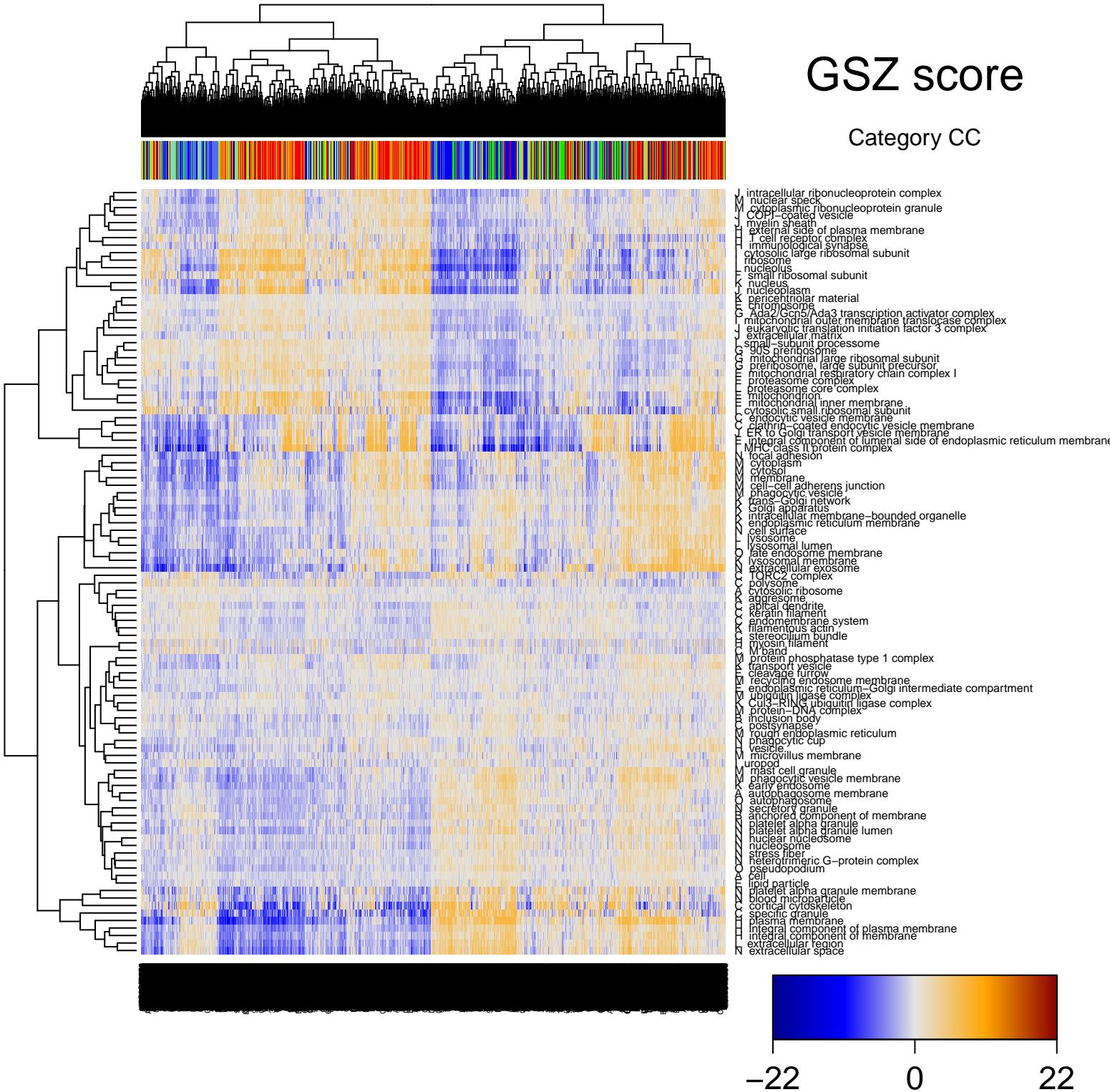
Category Cancer

- G KUIPER\_MM good survival  
J WOLFER\_overlap genes  
J GENTLES\_modul16  
J RHODES\_CANCER\_META\_SIGNATURE  
M PanCan\_Wnt\_geneset\_nanostring  
I ZHANG\_MM up  
J GENTLES\_modul11  
K GENTLES\_modul6  
G GENTLES\_modul10  
E PanCan\_DNARepair\_geneset\_nanostring  
G GENTLES\_modul5  
O PanCan\_HK\_geneset\_nanostring  
M GENTLES\_modul7  
J GENTLES\_modul1  
I GENTLES\_modul18  
K PanCan\_Driver\_Gene\_geneset\_nanostring  
M PanCan\_TGF-B\_geneset\_nanostring  
M PanCan\_CC+Apop\_geneset\_nanostring  
M GENTLES\_modul14  
O PanCan\_JAK-ST\_geneset\_nanostring  
H PanCan\_TXmisReg\_geneset\_nanostring  
H PanCan\_PI3K\_geneset\_nanostring  
M GENTLES\_modul12  
I ZHANG\_MGUS up  
A SOTIRIOU\_BREAST\_CANCER\_GRADE\_1\_VS\_3\_UP  
L RHODES\_UNDIFFERENTIATED\_CANCER  
J GENTLES\_modul3  
M KUIPER\_MM poor survival  
B PanCan\_ChromMod\_geneset\_nanostring  
E GENTLES\_modul2  
A GENTLES\_modul8  
L WANG\_ER\_DN  
A LIU\_BREAST\_CANCER  
N LIU\_PROSTATE\_CANCER\_DN  
I SOTIRIOU\_BREAST\_CANCER\_GRADE\_1\_VS\_3\_DN  
B PanCan\_Notch\_geneset\_nanostring  
N GENTLES\_modul13  
E LIU\_PROSTATE\_CANCER\_UP  
A GENTLES\_modul17  
A PanCan\_HH\_geneset\_nanostring  
B BEN-PORATH\_DN  
M SHAUGHNESSY\_MM high risk  
N GENTLES\_modul4  
O PanCan\_RAS\_geneset\_nanostring  
O PanCan\_MAPK\_geneset\_nanostring  
M BEN-PORATH\_UP  
A LIU\_COMMON\_CANCER\_GENES  
A WANG\_ER\_UP  
N LIU\_LIVER\_CANCER  
E Lembcke\_Normal vs Adenoma  
L Lembcke\_Colonie Inflammation  
L SPANG\_LPS-index2  
L SPANG\_BCL6-index2

-16 0 16

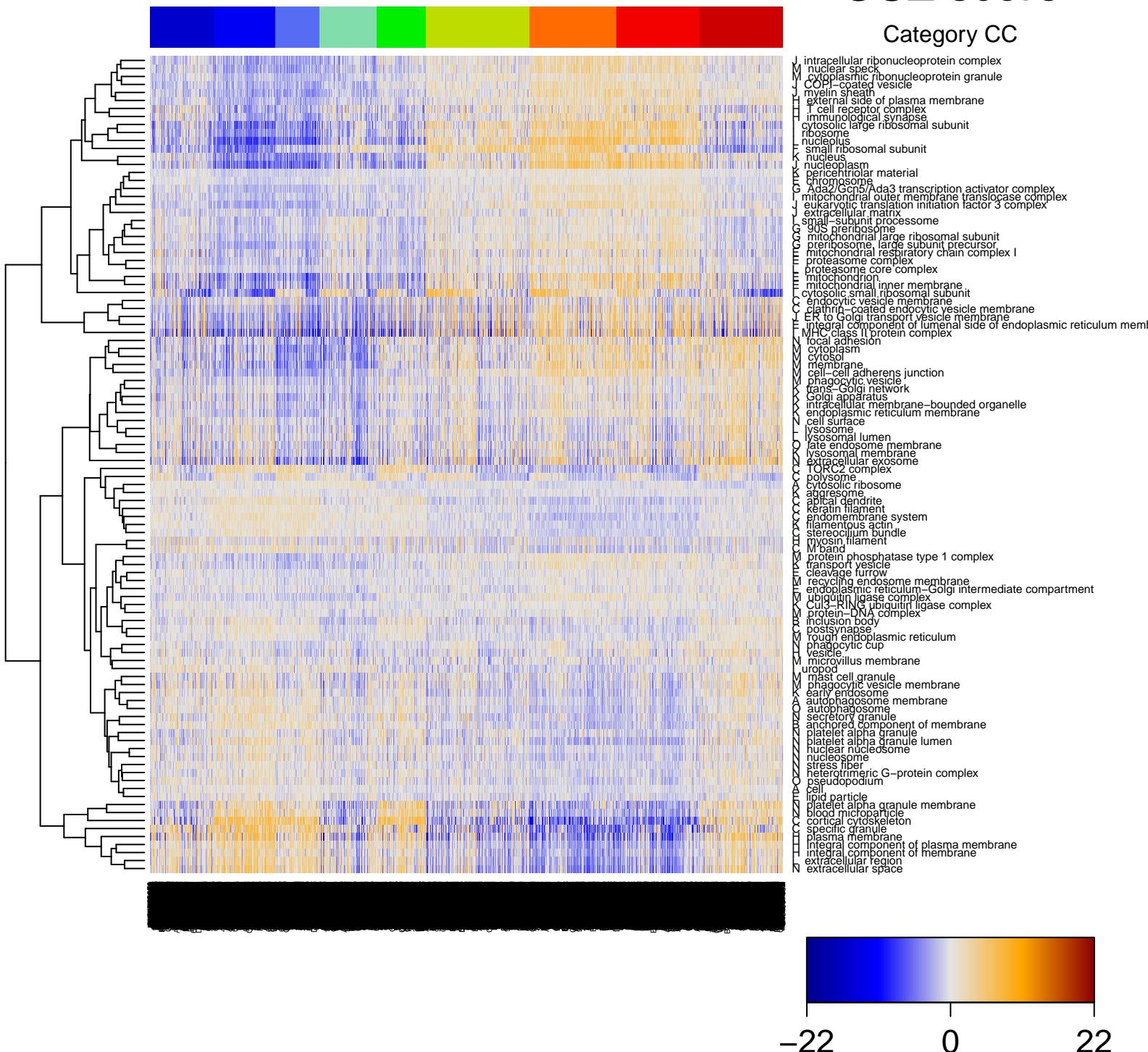
# GSZ score

Category CC



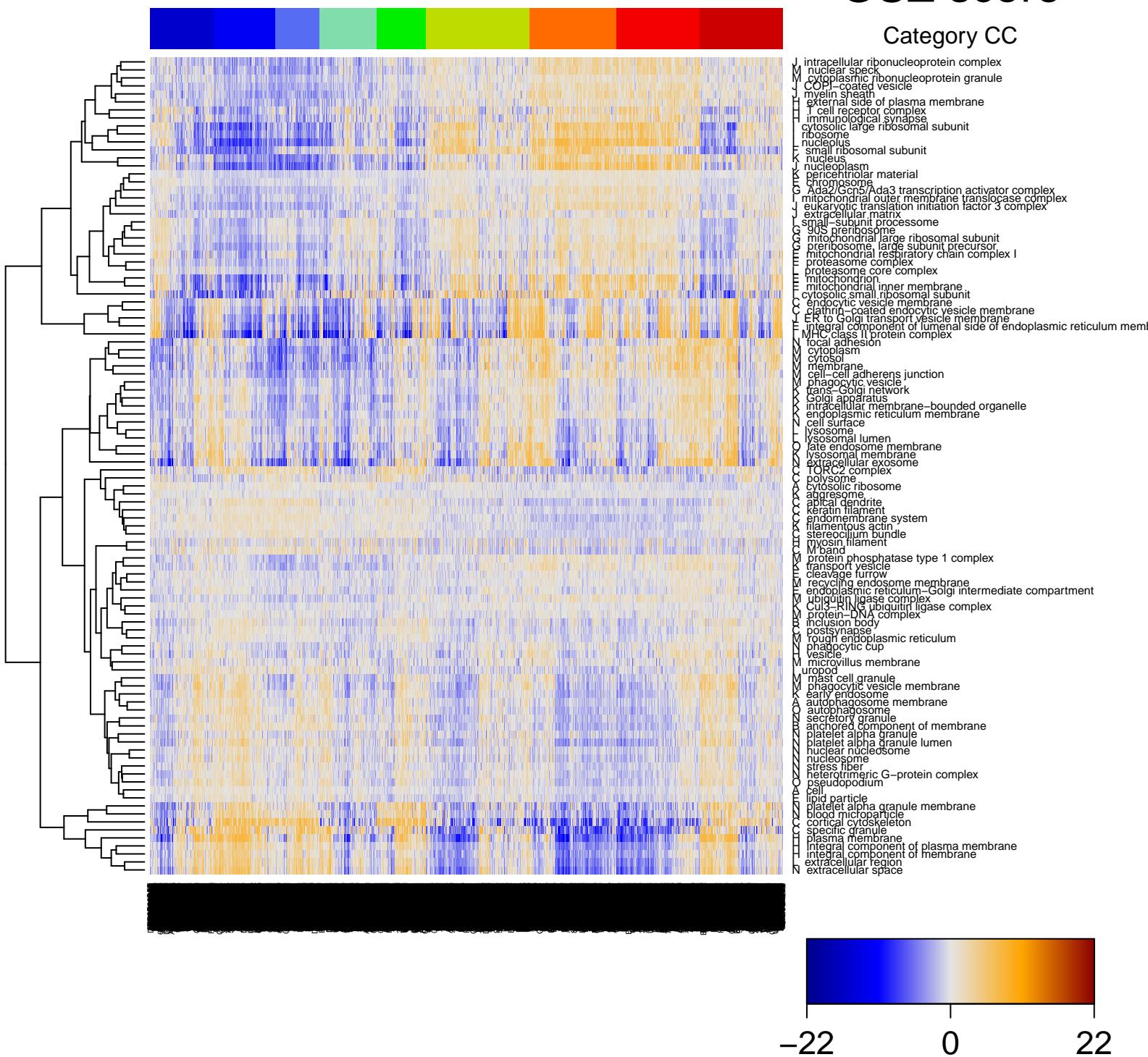
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Category CC



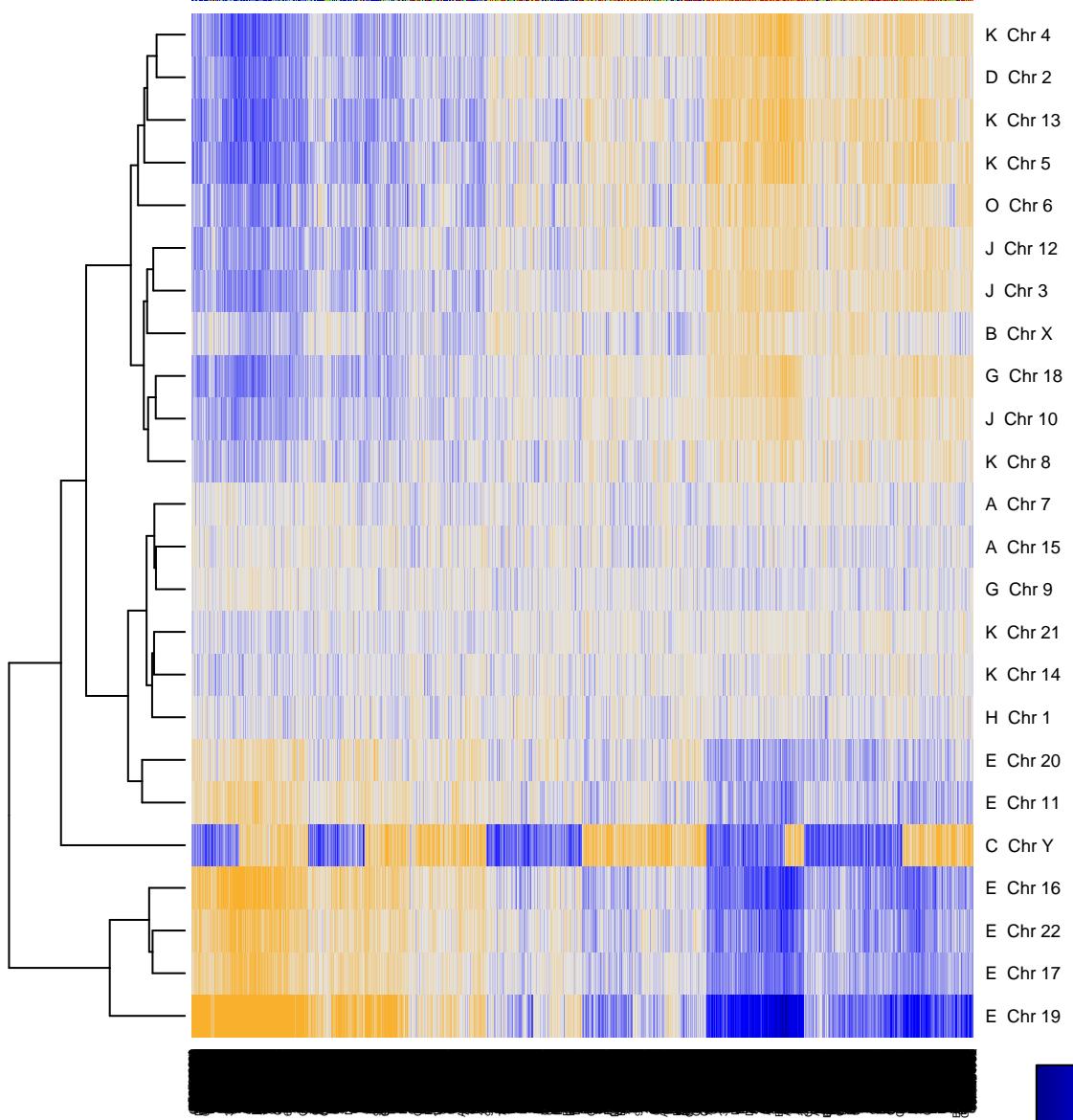
# GSZ score

## Category CC



# GSZ score

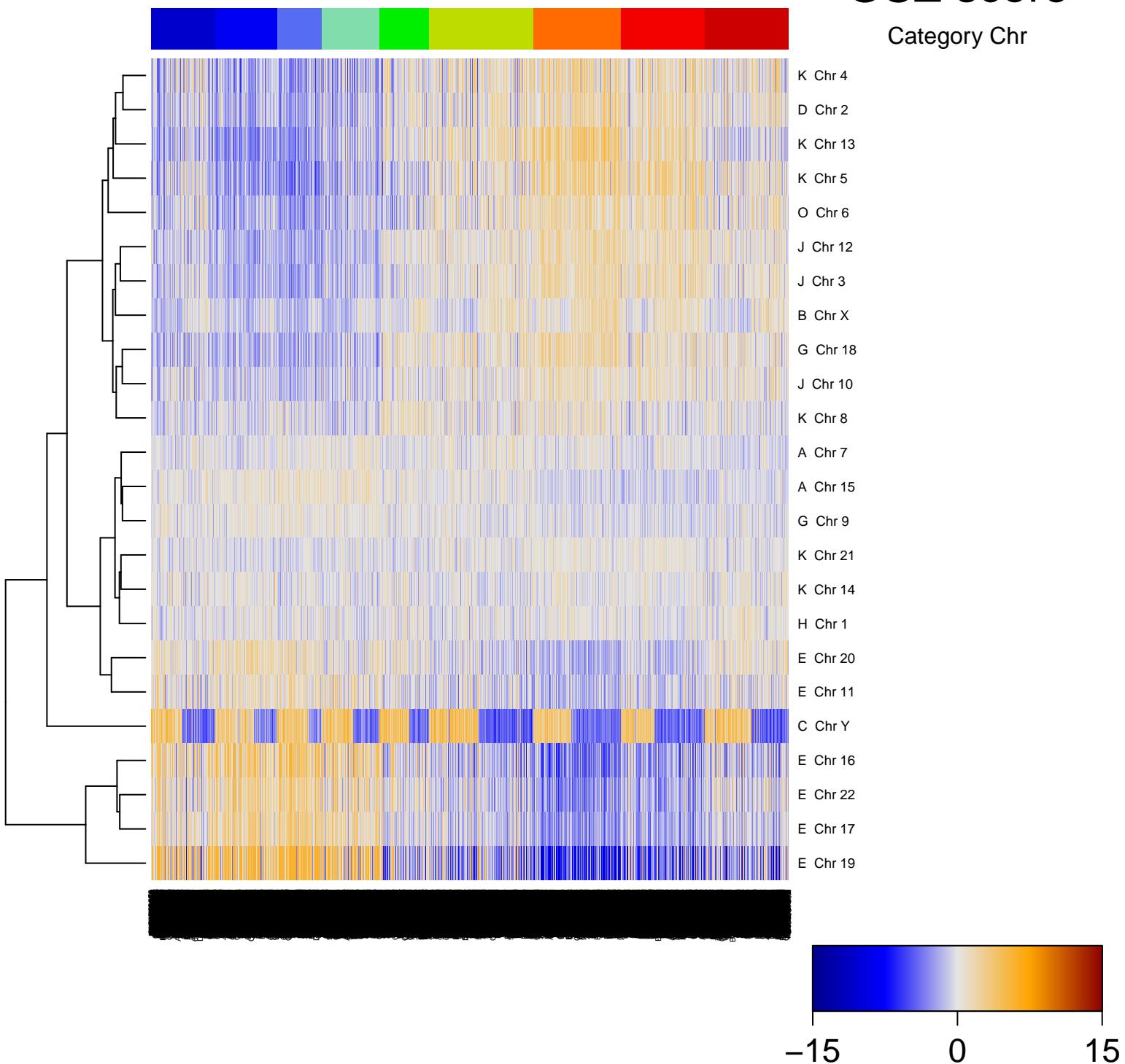
Category Chr



-15 0 15

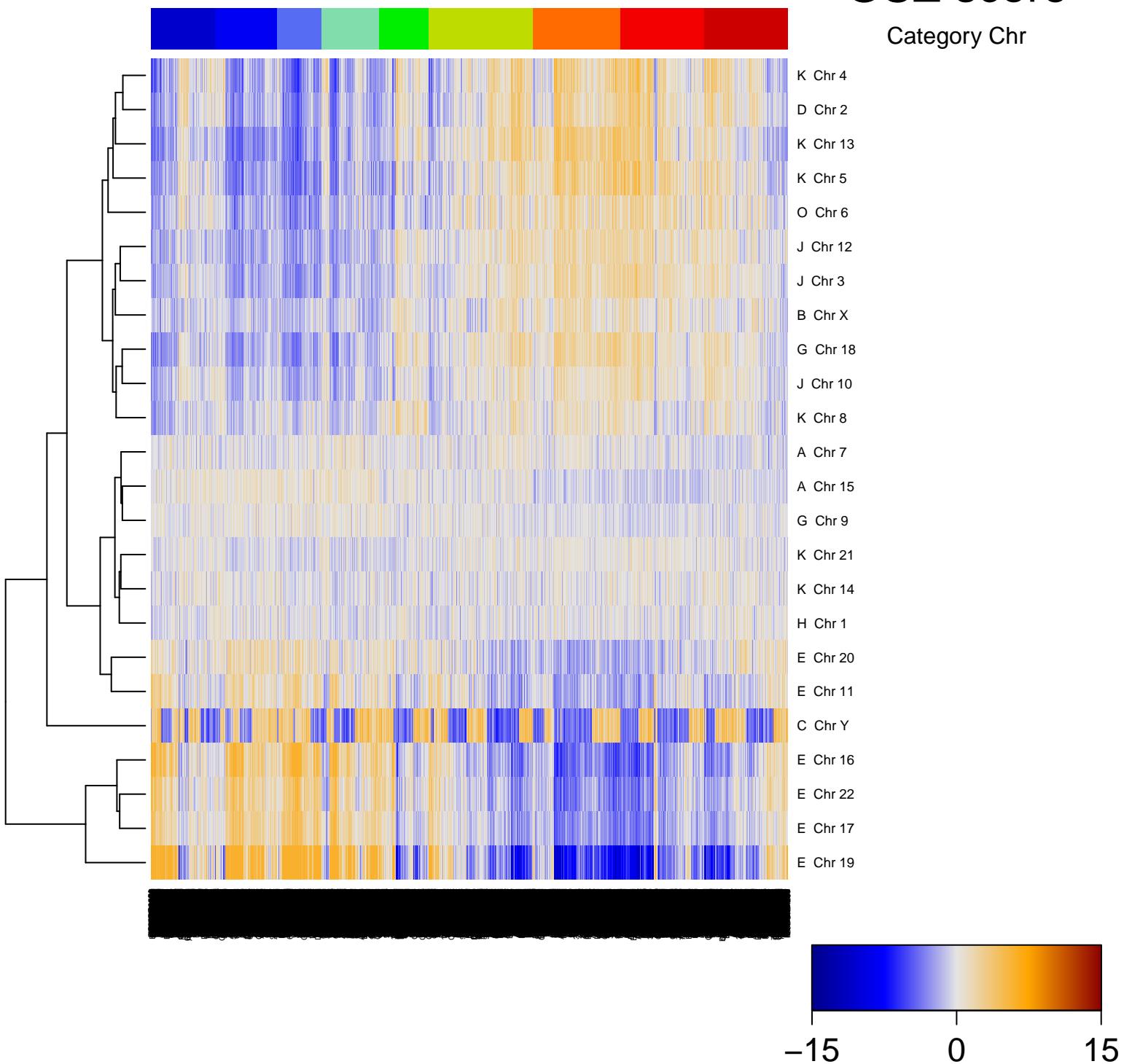
# GSZ score

Category Chr



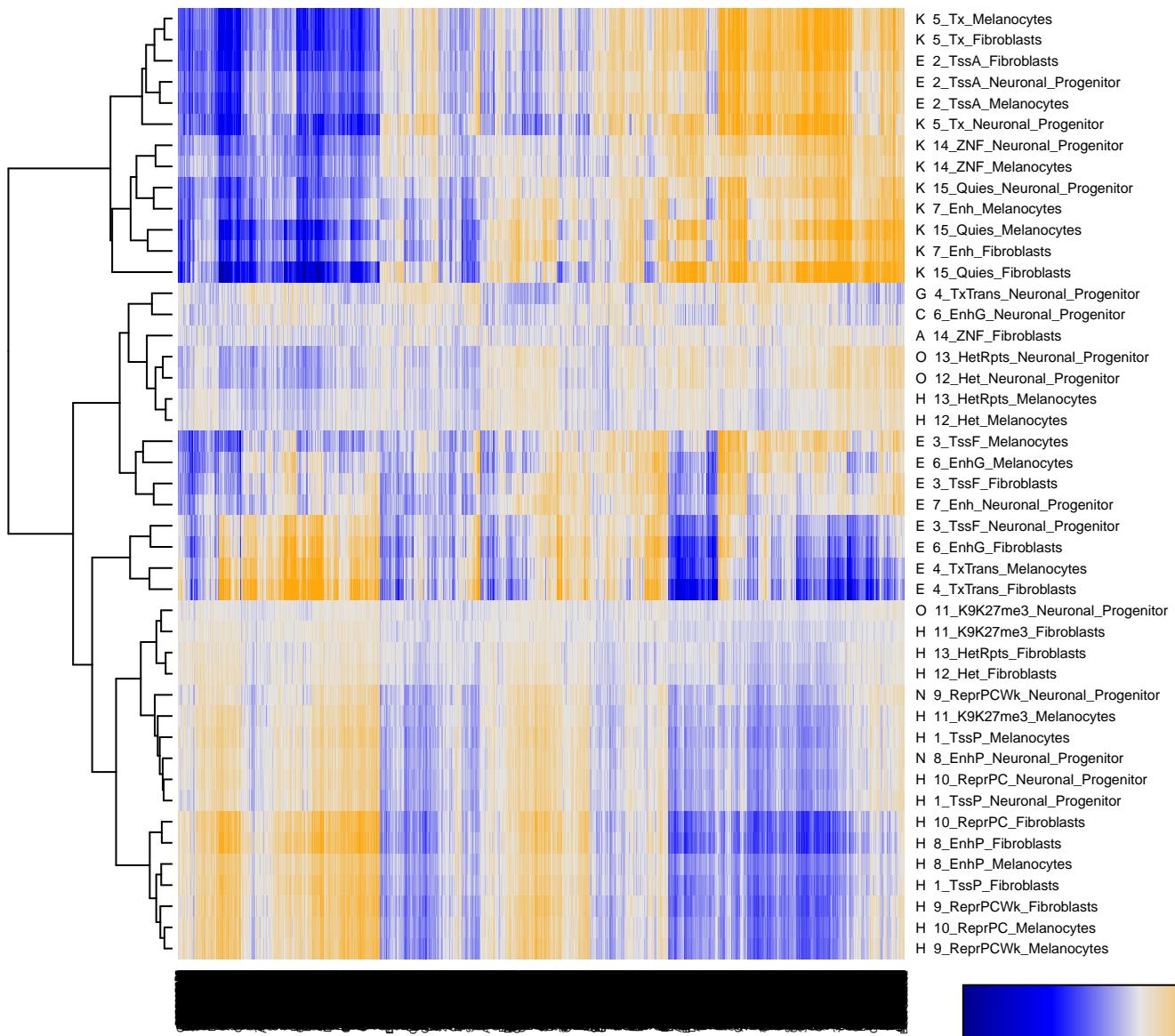
# GSZ score

Category Chr



# GSZ score

Category Chromatin states



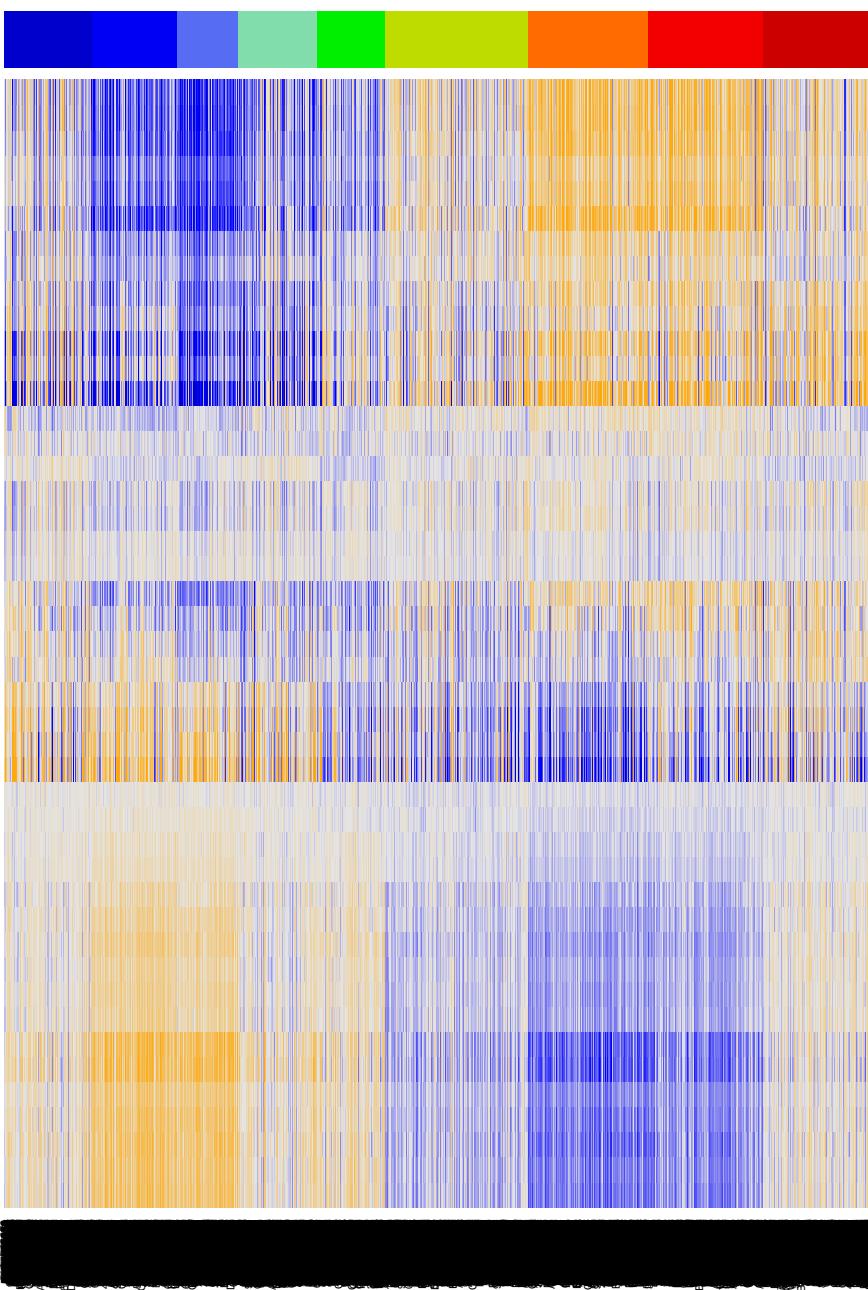
-25 0 25

# GSZ score

Category Chromatin states

K 5\_Tx\_Melanocytes  
K 5\_Tx\_Fibroblasts  
E 2\_TssA\_Fibroblasts  
E 2\_TssA\_Neuronal\_Progenitor  
E 2\_TssA\_Melanocytes  
K 5\_Tx\_Neuronal\_Progenitor  
K 14\_ZNF\_Neuronal\_Progenitor  
K 14\_ZNF\_Melanocytes  
K 15\_Quies\_Neuronal\_Progenitor  
K 7\_Enh\_Melanocytes  
K 15\_Quies\_Melanocytes  
K 7\_Enh\_Fibroblasts  
K 15\_Quies\_Fibroblasts  
G 4\_TxTrans\_Neuronal\_Progenitor  
C 6\_EnhG\_Neuronal\_Progenitor  
A 14\_ZNF\_Fibroblasts  
O 13\_HetRpts\_Neuronal\_Progenitor  
O 12\_Het\_Neuronal\_Progenitor  
H 13\_HetRpts\_Melanocytes  
H 12\_Het\_Melanocytes  
E 3\_TssF\_Melanocytes  
E 6\_EnhG\_Melanocytes  
E 3\_TssF\_Fibroblasts  
E 7\_Enh\_Neuronal\_Progenitor  
E 3\_TssF\_Neuronal\_Progenitor  
E 6\_EnhG\_Fibroblasts  
E 4\_TxTrans\_Melanocytes  
E 4\_TxTrans\_Fibroblasts  
O 11\_K9K27me3\_Neuronal\_Progenitor  
H 11\_K9K27me3\_Fibroblasts  
H 13\_HetRpts\_Fibroblasts  
H 12\_Het\_Fibroblasts  
N 9\_ReprPCWk\_Neuronal\_Progenitor  
H 11\_K9K27me3\_Melanocytes  
H 1\_TssP\_Melanocytes  
N 8\_EnhP\_Neuronal\_Progenitor  
H 10\_ReprPC\_Neuronal\_Progenitor  
H 1\_TssP\_Neuronal\_Progenitor  
H 10\_ReprPC\_Fibroblasts  
H 8\_EnhP\_Fibroblasts  
H 8\_EnhP\_Melanocytes  
H 1\_TssP\_Fibroblasts  
H 9\_ReprPCWk\_Fibroblasts  
H 10\_ReprPC\_Melanocytes  
H 9\_ReprPCWk\_Melanocytes

-25 0 25



# GSZ score

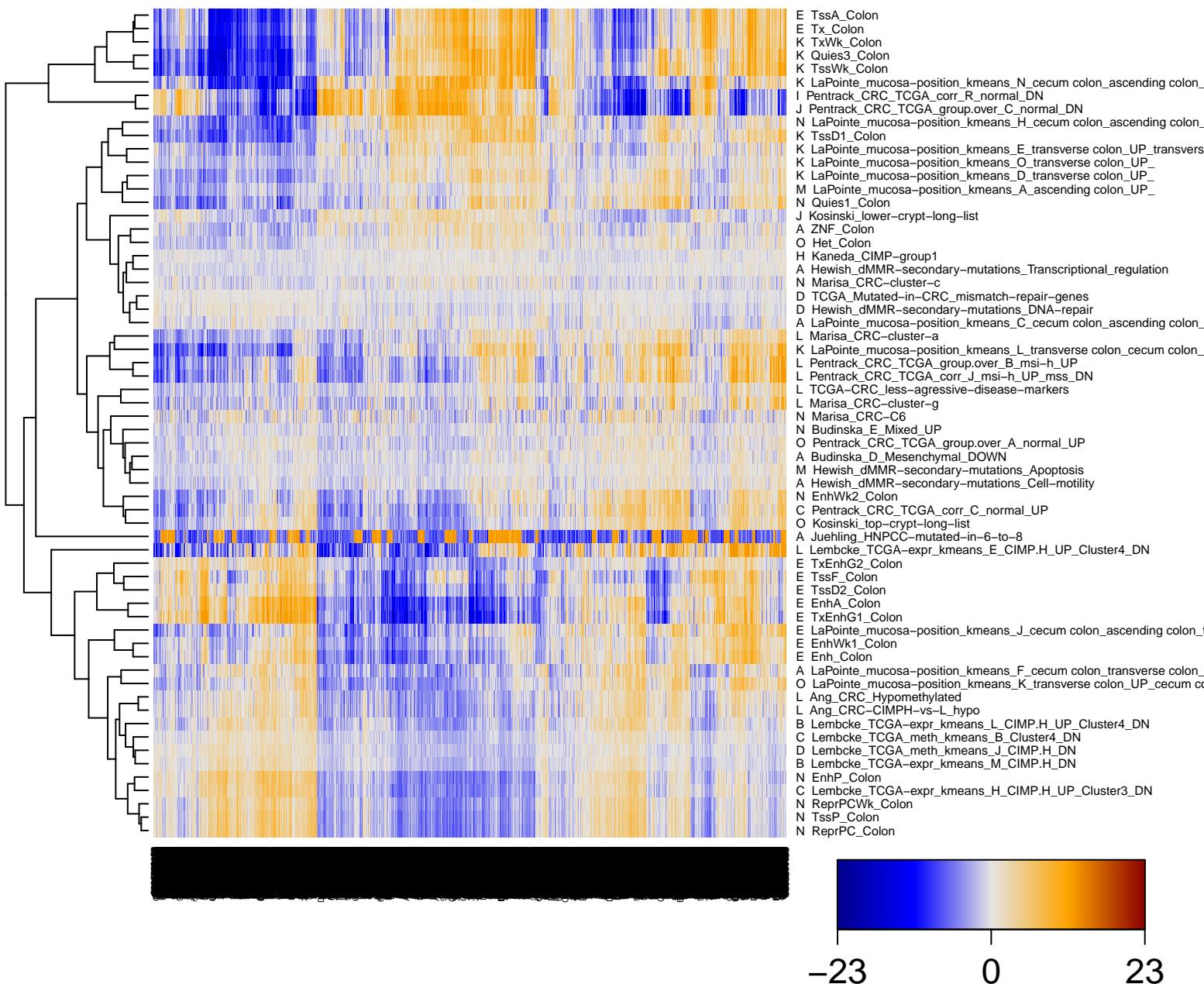
Category Chromatin states

K 5\_Tx\_Melanocytes  
K 5\_Tx\_Fibroblasts  
E 2\_TssA\_Fibroblasts  
E 2\_TssA\_Neuronal\_Progenitor  
E 2\_TssA\_Melanocytes  
K 5\_Tx\_Neuronal\_Progenitor  
K 14\_ZNF\_Neuronal\_Progenitor  
K 14\_ZNF\_Melanocytes  
K 15\_Quies\_Neuronal\_Progenitor  
K 7\_Enh\_Melanocytes  
K 15\_Quies\_Melanocytes  
K 7\_Enh\_Fibroblasts  
K 15\_Quies\_Fibroblasts  
G 4\_TxTrans\_Neuronal\_Progenitor  
C 6\_EnhG\_Neuronal\_Progenitor  
A 14\_ZNF\_Fibroblasts  
O 13\_HetRpts\_Neuronal\_Progenitor  
O 12\_Het\_Neuronal\_Progenitor  
H 13\_HetRpts\_Melanocytes  
H 12\_Het\_Melanocytes  
E 3\_TssF\_Melanocytes  
E 6\_EnhG\_Melanocytes  
E 3\_TssF\_Fibroblasts  
E 7\_Enh\_Neuronal\_Progenitor  
E 3\_TssF\_Neuronal\_Progenitor  
E 6\_EnhG\_Fibroblasts  
E 4\_TxTrans\_Melanocytes  
E 4\_TxTrans\_Fibroblasts  
O 11\_K9K27me3\_Neuronal\_Progenitor  
H 11\_K9K27me3\_Fibroblasts  
H 13\_HetRpts\_Fibroblasts  
H 12\_Het\_Fibroblasts  
N 9\_ReprPCWk\_Neuronal\_Progenitor  
H 11\_K9K27me3\_Melanocytes  
H 1\_TssP\_Melanocytes  
N 8\_EnhP\_Neuronal\_Progenitor  
H 10\_ReprPC\_Neuronal\_Progenitor  
H 1\_TssP\_Neuronal\_Progenitor  
H 10\_ReprPC\_Fibroblasts  
H 8\_EnhP\_Fibroblasts  
H 8\_EnhP\_Melanocytes  
H 1\_TssP\_Fibroblasts  
H 9\_ReprPCWk\_Fibroblasts  
H 10\_ReprPC\_Melanocytes  
H 9\_ReprPCWk\_Melanocytes

-25 0 25

# GSZ score

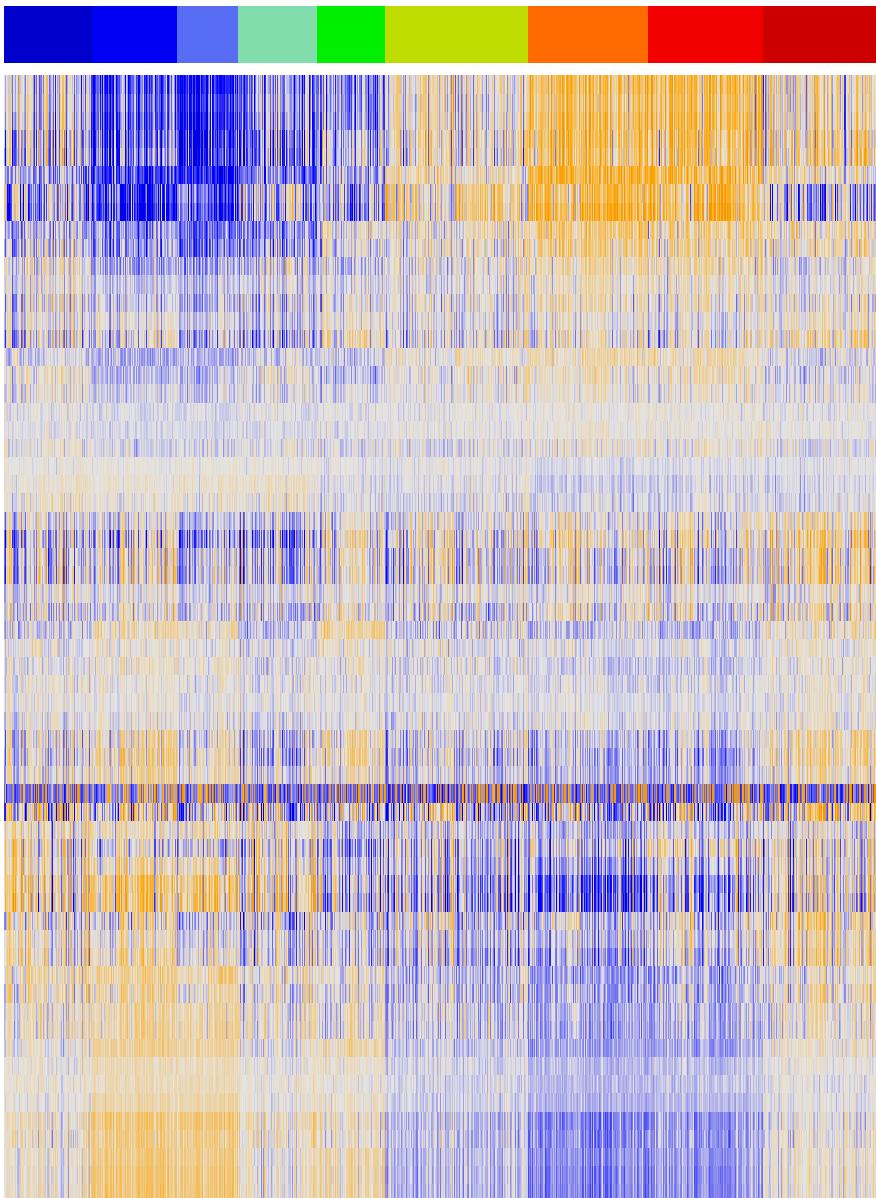
Category Colon Cancer



# GSZ score

Category Colon Cancer

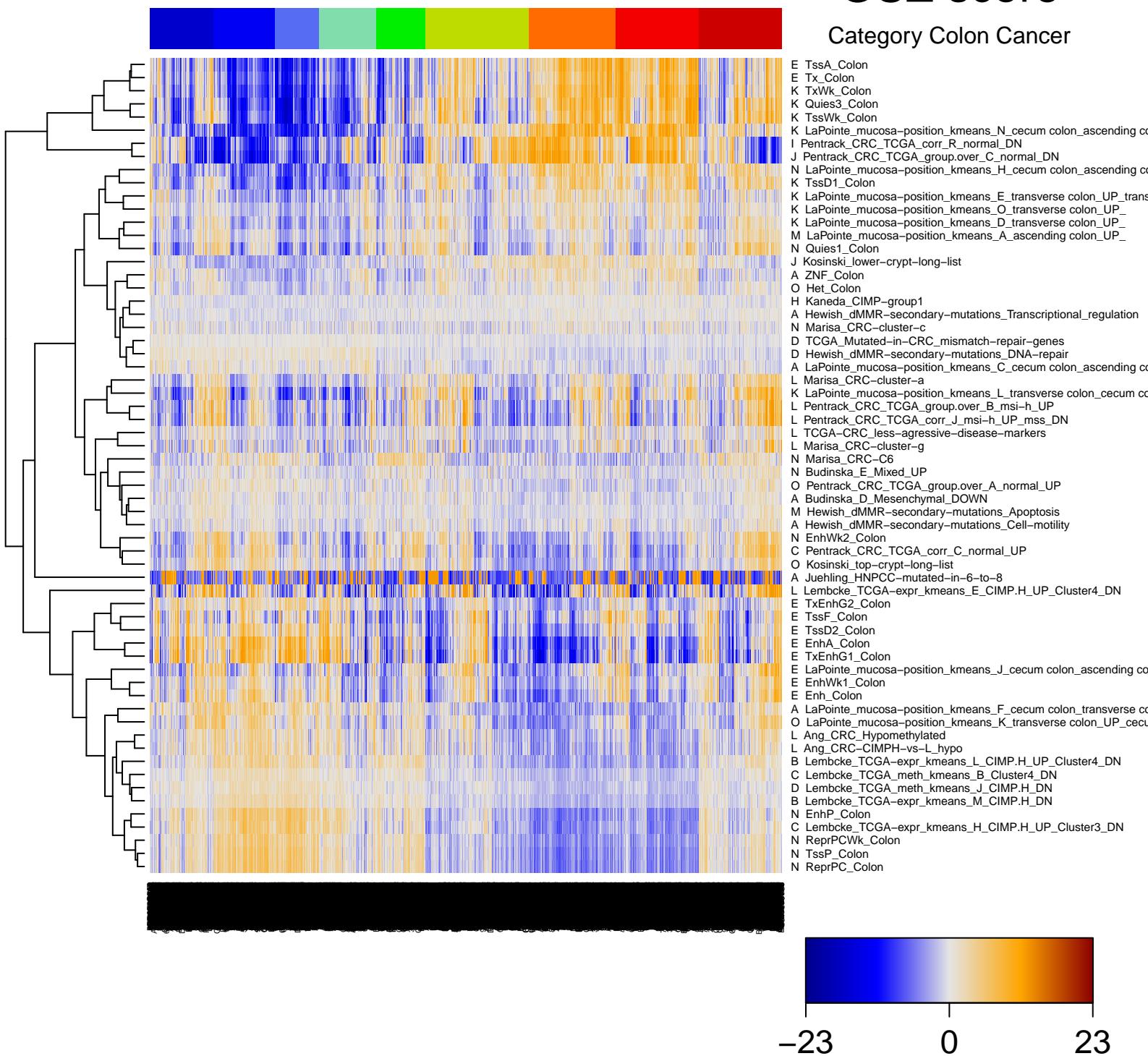
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E Tx_Colon
K TxWk_Colon
K Quies3_Colon
K TssWk_Colon
K LaPointe_mucosa-position_kmeans_N_cecum colon_ascending co
I Pentrack_CRC_TCGA_corr_R_normal_DN
J Pentrack_CRC_TCGA_group_over_C_normal_DN
N LaPointe_mucosa-position_kmeans_H_cecum colon_ascending co
K TssD1_Colon
K LaPointe_mucosa-position_kmeans_E_transverse colon_UP_trans
K LaPointe_mucosa-position_kmeans_O_transverse colon_UP_
K LaPointe_mucosa-position_kmeans_D_transverse colon_UP_
M LaPointe_mucosa-position_kmeans_AAscending colon_UP_
N Quies1_Colon
J Kosinski_lower-crypt-long-list
A ZNF_Colon
H Het_Colon
H Kaneda_CIMP-group1
A Hewish_dMMR-secondary-mutations_Transcriptional_regulation
N Marisa_CRC-cluster-c
D TCGA_Mutated-in-CRC_mismatch-repair-genes
D Hewish_dMMR-secondary-mutations_DNA-repair
A LaPointe_mucosa-position_kmeans_C_cecum colon_ascending co
L Marisa_CRC-cluster-a
K LaPointe_mucosa-position_kmeans_L_transverse colon_cecum co
L Pentrack_CRC_TCGA_group_over_B_msi-h_UP
L Pentrack_CRC_TCGA_corr_J_msi-h_UP_mss_DN
L TCGA-CRC_less-aggressive-disease-markers
L Marisa_CRC-cluster-g
N Marisa_CRC-C6
N Budinska_E_Mixed_UP
O Pentrack_CRC_TCGA_group_over_A_normal_UP
A Budinska_D_Mesenchymal_DOWN
M Hewish_dMMR-secondary-mutations_Apoptosis
A Hewish_dMMR-secondary-mutations_Cell-motility
N EnhWk2_Colon
C Pentrack_CRC_TCGA_corr_C_normal_UP
O Kosinski_top-crypt-long-list
A Juehling_HNPCC-mutated-in-6-to-8
L Lembcke_TCGA-expr_kmeans_E_CIMP.H_UP_Cluster4_DN
E TxEnhG2_Colon
E TssF_Colon
E TssD2_Colon
E EnhA_Colon
E TxEnhG1_Colon
E LaPointe_mucosa-position_kmeans_J_cecum colon_ascending co
E EnhWk1_Colon
E Enh_Colon
A LaPointe_mucosa-position_kmeans_F_cecum colon_transverse co
O LaPointe_mucosa-position_kmeans_K_transverse colon_UP_cecu
L Ang_CRC_Hypomethylated
L Ang_CRC_CIMPH-vs-L_hypo
B Lembcke_TCGA-expr_kmeans_L_CIMP.H_UP_Cluster4_DN
C Lembcke_TCGA_meth_kmeans_B_Cluster4_DN
D Lembcke_TCGA_meth_kmeans_J_CIMP.H_DN
B Lembcke_TCGA-expr_kmeans_M_CIMP.H_DN
N EnhP_Colon
C Lembcke_TCGA-expr_kmeans_H_CIMP.H_UP_Cluster3_DN
N ReprPCWk_Colon
N TssP_Colon
N ReprPC_Colon



-23 0 23

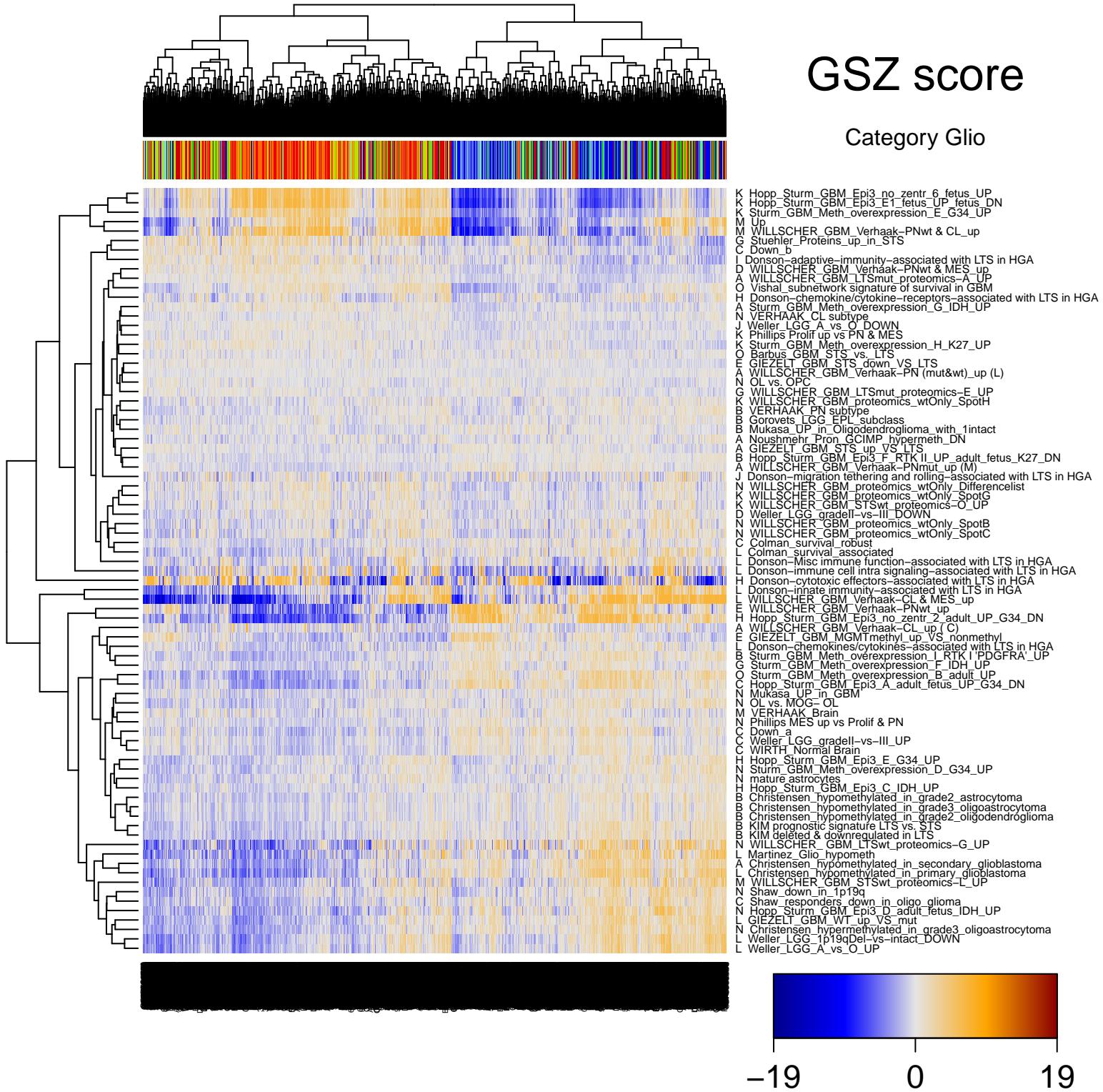
# GSZ score

Category Colon Cancer



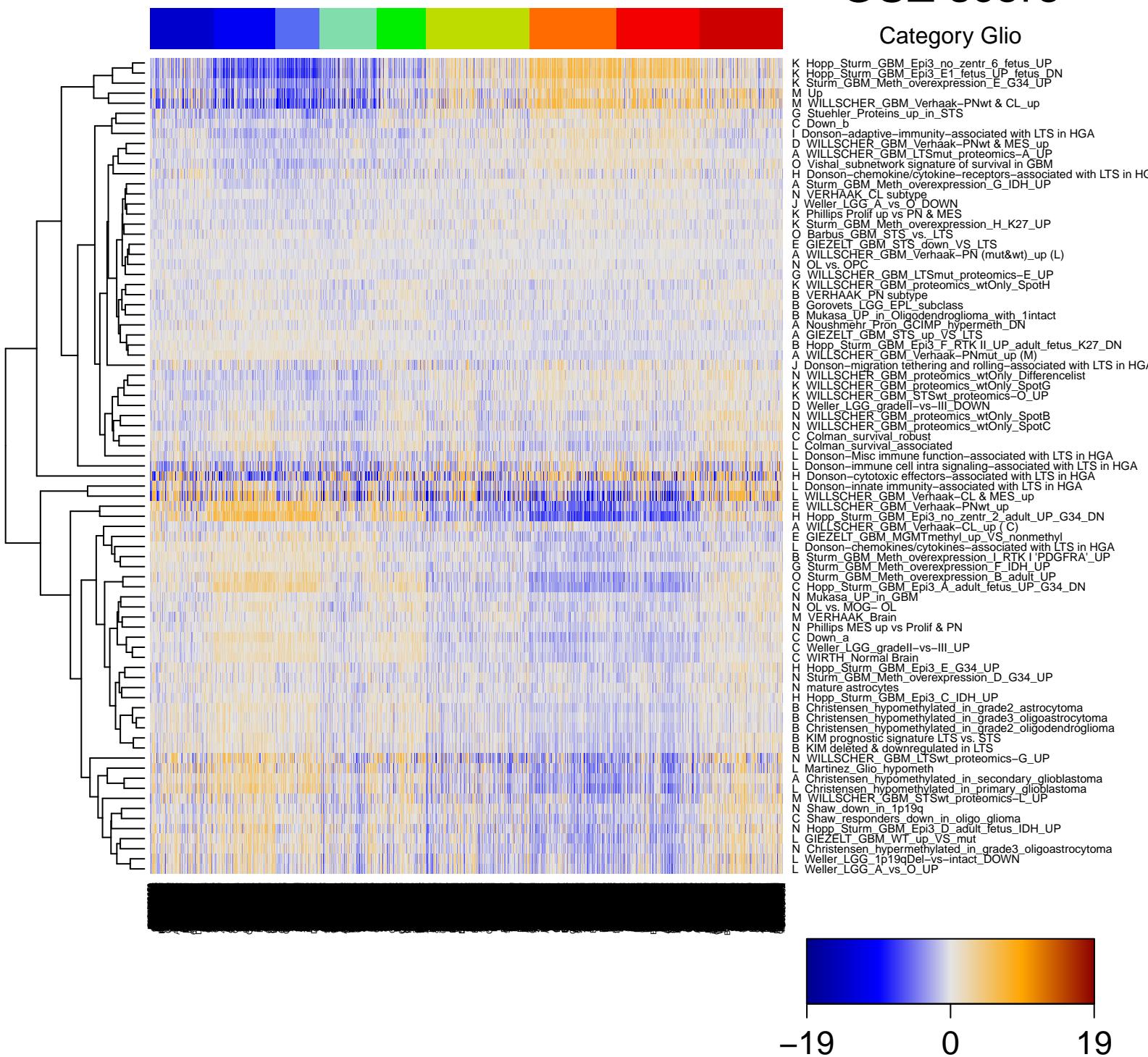
# GSZ score

Category Glio



# GSZ score

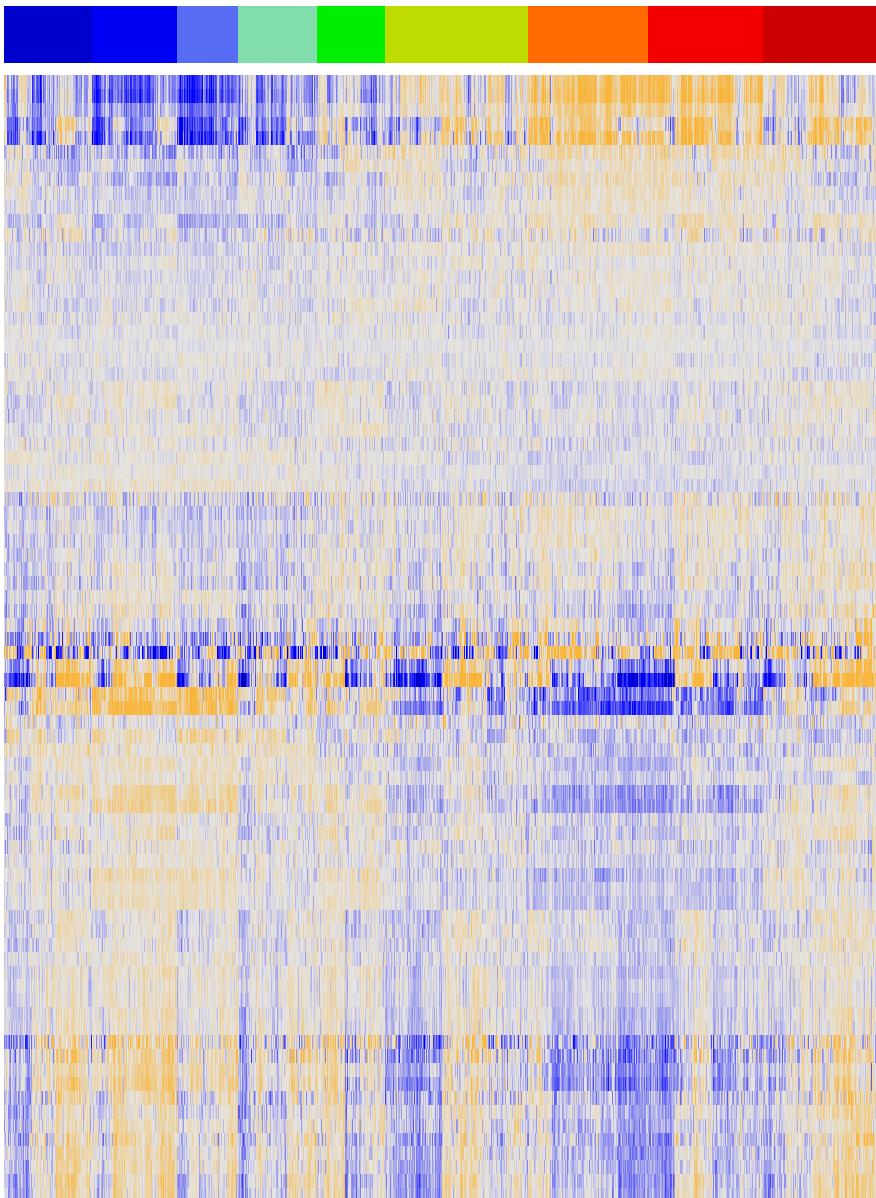
## Category Glio



# GSZ score

## Category Glio

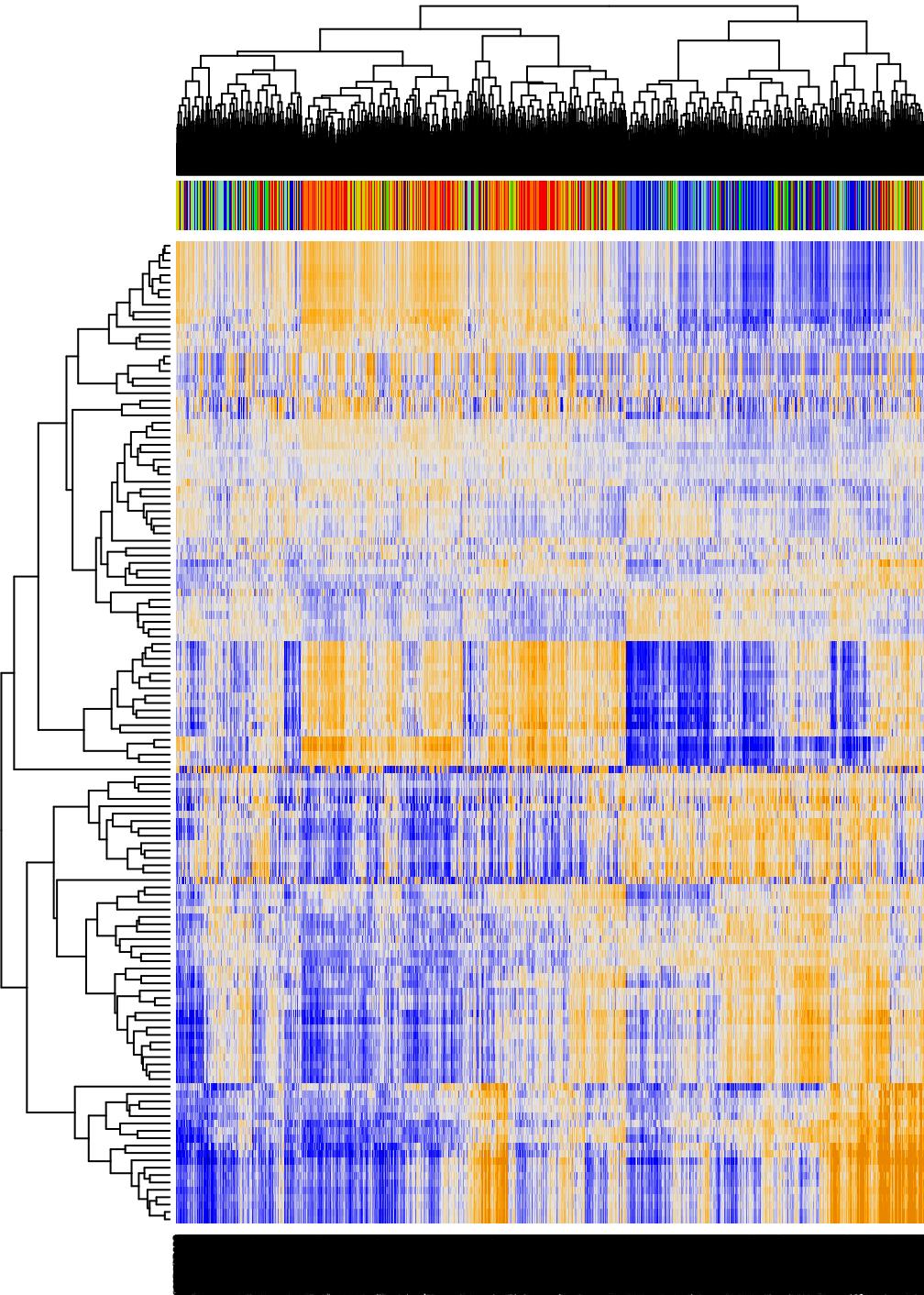
K	Hopp_Sturm_GBM_Epi3_no_zentr_6_fetus_UP
K	Hopp_Sturm_GBM_Epi3_E1_fetus_UP_fetus_DN
K	Sturm_GBM_Meth_overexpression_E_G34_UP
M	Up
M	WILLSCHER_GBM_Verhaak-PNwt & CL_up
G	Stuehler_Proteins_up_in_STS
G	Down_b
I	Donson_adaptive immunity-associated with LTS in HGA
I	WILLSCHER_GBM_Verhaak-PNwt & MES_up
AA	WILLSCHER_GBM_LTSMut_proteomics_A_UP
AO	Vishal_subnetwork_signature_of_survival_in_GBM
OH	Donson_chemokine/cytokine-receptors-associated with LTS in HGA
AH	Sturm_GBM_Meth_overexpression_G_IDH_UP
AV	VERHAAK_CL_subtype
J	Weller_LGG_A_vs_O_DOWN
JK	Phillips_Prolif_up_vs_PN & MES
KK	Sturm_GBM_Meth_overexpression_H_K27_UP
KK	Berbus_GBM_STS_vs_STS
KG	GIEZELT_GBM_STS_down_vs_LTS
KA	WILLSCHER_GBM_Verhaak-PN (mut&wt)_up (L)
NG	OL_vs_OP_C
WK	WILLSCHER_GBM_LTSMut_proteomics_E_UP
WK	WILLSCHER_GBM_proteomics_wtOnly_SpotH
KB	VERHAAK_PN subtype
BB	Groovets_LGG_EP1_subclass
BB	Mukasa_UP_in oligodendroglioma_with_1intact
AA	Noumehr_Prof_GCIMP_hypermethyl_DN
AG	GIEZELT_GBM_STS_up_VS_LTS
BA	Hopp_Sturm_GBM_Epi3_F_RTKII_UP_adult_fetus_K27_DN
AA	WILLSCHER_GBM_Verhaak_PNmut_up (M)
J	Donson_migration_tethering_and_rolling_associated with LTS in HGA
I	WILLSCHER_GBM_proteomics_wtOnly_Differencelist
KK	WILLSCHER_GBM_proteomics_wtOnly_SpotG
KK	WILLSCHER_GBM_LTSMut_proteomics_O_UP
DD	Weller_LGG_gradell-vs_III_DOWN
NN	WILLSCHER_GBM_proteomics_wtOnly_SpotB
NN	WILLSCHER_GBM_proteomics_wtOnly_SpotC
CC	Colman_survival_robust
DN	Donson_survival_associated
DN	Donson immune cell intra_lung-associated with LTS in HGA
DN	Donson_cytotoxic_effectors_associated with LTS in HGA
DN	Donson_imate_immunosignature_associated with LTS in HGA
WILL	SCHER_GBM_Verhaak_CL & MES_UP
WILL	SCHER_GBM_Verhaak_PNwt_up
H	Hopp_Sturm_GBM_Epi3_no_zentr_2_adult_UP_G34_DN
AEE	WILLSCHER_GBM_Verhaak_CL_up (C)
GIEZELT	GBM_MGMTmethylated_up_VS_nonmethyl
Donson	chemokines/cytokines_associated with LTS in HGA
Sturm	GBM_Meth_overexpression_L_RTKI_PDGFRalpha_UP
Sturm	GBM_Meth_overexpression_F_IDH_UP
Sturm	GBM_Meth_overexpression_B_adult_UP
Hopp	Sturm_GBM_Epi3_A_adult_fetus_UP_G34_DN
Mukasa	UP_in_GBM
NO	OL_vs_MOG_OL
M	VERHAAK_Brain
PH	Phillips_MES_up_vs_Prolif & PN
Down_a	Weller_LGG_gradell-vs_III_UP
WIRTH	Normal_Brain
H	Hopp_Sturm_GBM_Epi3_E_G34_UP
HNN	Sturm_GBM_Meth_overexpression_D_G34_UP
N	matured astrocytes
H	Hopp_Sturm_GBM_Epi3_C_IDH_UP
B	Christensen_hypomethylated_in_grade2_astrocytoma
BB	Christensen_hypomethylated_in_grade3_oligoastrocytoma
BB	Christensen_hypomethylated_in_grade2_oligodendrogloma
BB	KIM_prognostic_signature_STS_vs_STS
KIM	detected & downregulated in LTS
N	WILLSCHER_GBM_LTSMut_proteomics_G_UP
L	Martinez_Glio_hypometh
A	Christensen_hypomethylated_in_secondary_glioblastoma
A	Christensen_hypomethylated_in_primary_glioblastoma
M	WILLSCHER_GBM_LTSMut_proteomics_L_UP
M	Shaw_down_in_1p19q
C	Shaw_responders_down_in_oligo_glioma
Hopp	Sturm_GBM_Epi3_D_adult_fetus_IDH_UP
L	GIEZELT_GBM_WT_up_VS_mut
N	Christensen_hypermethylated_in_grade3_oligoastrocytoma
L	Weller_LGG_1p19qDel-vs_intact_DOWN
L	Weller_LGG_A_vs_O_UP



-19 0 19

# GSZ score

Category GSEA C2

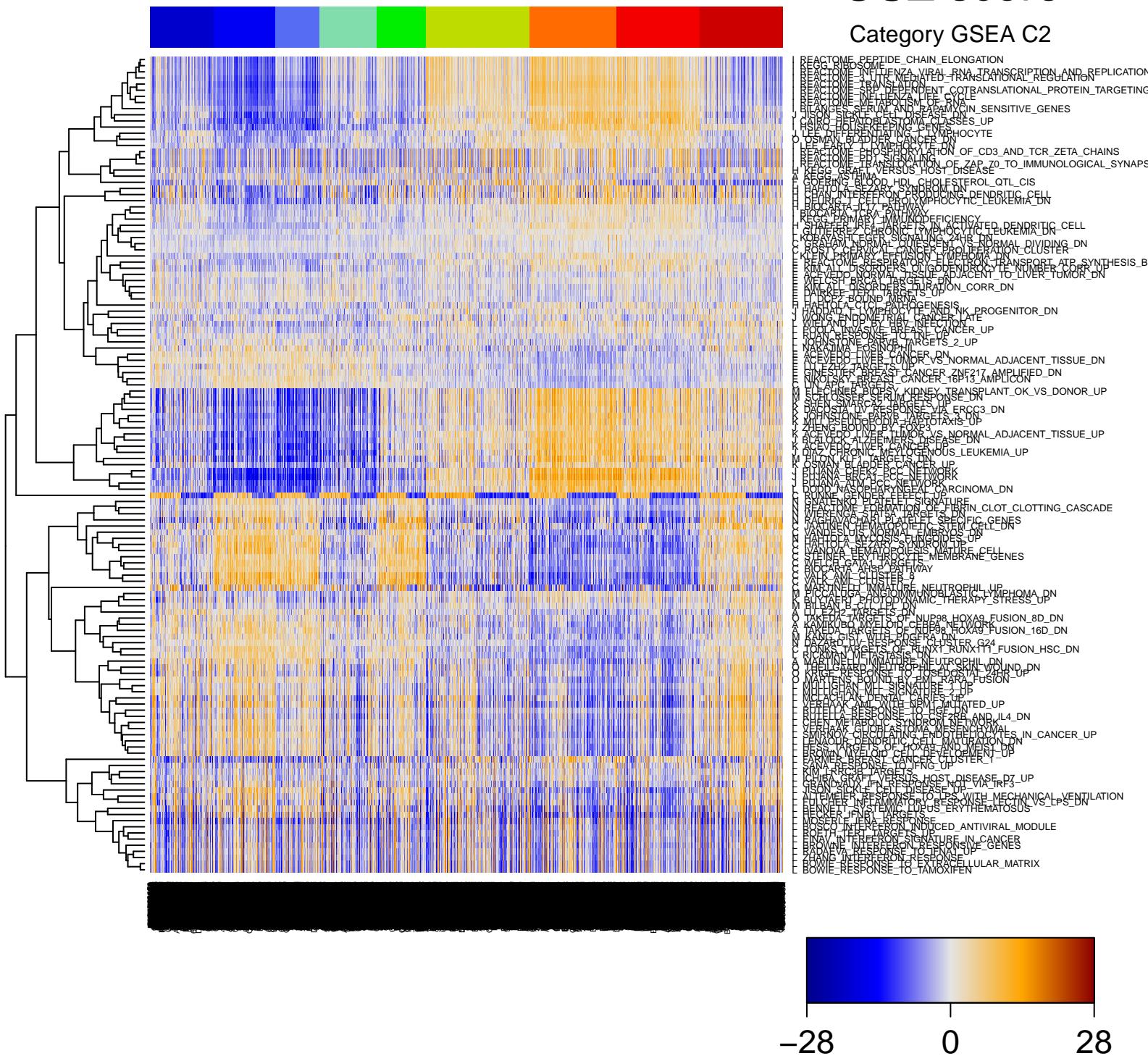


REACTOME PEPTIDE\_CHAIN\_ELONGATION  
 REACTOME INITIATION\_VIA\_RNA\_TRANSCRIPTION\_AND\_REPLICATION  
 REACTOME\_TRANSLATION\_COTRANSLATIONAL\_PROTEIN\_TARGETING\_TO\_BERLIN  
 REACTOME\_SEPARATION\_OF\_EIF4E\_IN\_SENSITIVE\_GENES  
 JASON\_SICKLE\_CELL\_DISEASE\_P55B1N\_SENSITIVE\_GENES  
 HSAC01\_HOUSEKEEPING\_GENESSES\_UP  
 OSMAN\_BRONCHITIS\_UP  
 LEE\_PARTY\_PHOMHOXIZATION\_OF\_CD3\_AND\_TCR\_ZETA\_CHAINS  
 XEGG\_GRAFT\_VERSUS\_HOST\_DISEASE\_UP  
 ADERIS\_BEDROD\_HDL\_CHOLESTEROL\_QTL\_CIS  
 BARTOLA\_Lymphocyte\_DENDRITIC\_CELL  
 DEGRIS\_Lymphocyte\_Prolymphocytic\_Leukemia\_DN  
 RICCARITA\_Lymphocyte\_PATHWAY  
 REGG\_PRIMARY\_IMMUNODEFICIENCY  
 CHIERRER\_CHRONIC\_LYMPHOCYTIC\_LEUKEMIA\_DN  
 KOBANAN\_NORMAL\_GLIOMA\_UP  
 KERN\_PITUITARY\_EFFECTOR\_OF\_LYMPHOCYTIC\_DN  
 REACTOME\_COFACTORIZATION\_OF\_ATP\_SYNTHESIS\_BY\_CHLOROPHYLL  
 ACEVEDO\_NORMAL\_TISSUE\_ADJACENT\_TO\_LIVER\_TUMOR\_DN  
 ANGCA\_DISORDERS\_STURATION\_CORR\_DN  
 DAISKEI\_BOUND\_PLATELET\_UP  
 HARTOGA\_C1Q\_PLAGIOGENESIS\_SK\_PROGENITOR\_DN  
 MONG\_ENDOMETRIAL\_CANCER\_UP  
 EODOL\_INVASIVE\_BREAST\_CANCER\_UP  
 RHINA\_RESPONSE\_B\_C TARGETS\_2\_UP  
 NAGASIMA\_EOSINOPHIL\_DN  
 ACEVEDO\_LIVER\_TUMOR\_VS\_NORMAL\_ADJACENT\_TISSUE\_DN  
 GINESEKAY\_BREAST\_CANCER\_16P13\_AMPLICON  
 EICHENBERGER\_BIOPSY\_KIDNEY\_TRANSPLANT\_OK\_VS\_DONOR\_UP  
 SHEN\_SMARCA2B\_TARGETS\_UP  
 JOHNSTONE\_PARB\_TARGETS\_ERCC3\_DN  
 MELLESSEUDOFORIA\_HAETOXINS\_UP  
 ACEVEDO\_FIVER\_TUMOR\_VS\_NORMAL\_ADJACENT\_TISSUE\_UP  
 ACEVEDO\_LIVER\_TUMOR\_UP  
 MELTON\_BLADDER\_CANCER\_UP  
 OSMAN\_BLADDER\_CANCER\_UP  
 BHANJA\_ERCAT\_PCC\_NETWORK  
 DODDI\_NASOPOLYNGEAL\_ARCINOMA\_DN  
 RIQUE\_GENDER\_EFFECT\_SIGNATURE  
 REACTOME\_FORMATION\_OF\_FIBRIN\_CLOT\_CLOTTING CASCADE  
 RAGHAVACHARI\_PLATELET\_SPECIFIC\_GENES  
 VANDENPLAS\_MIGRATION\_OF\_EMBRYOS\_DN  
 HAFNIOLA\_MYCOSIS\_VIRGINIDES\_UP  
 VANADA\_HEMATOPOIESIS\_MATURE\_CELL  
 WELCH\_GATA4\_TARGETS\_MEMBRANE\_GENES  
 BOKKAM\_CLUSTER\_UP  
 VASTANNEL\_CHLOROPHYLL\_NEUTROPHIL\_UP  
 BICCALIGGA\_ANGIOMIMETOBLASTIC\_LYMPHOMA\_DN  
 BILAN\_B\_CHOLOID\_DYNAMIC\_THERAPY\_STRESS\_UP  
 LIKEPA2\_TARGETS\_UP\_NUP98\_HOXA9\_FUSION\_8D\_DN  
 KAMIKUBO\_AVELLOPDE\_CEPBA\_NETWORK\_FUSION\_16D\_DN  
 KANG\_GIST9TH\_EDEERA\_DN  
 DONKU\_TARGETS\_OF\_PRUNXY\_RUNX1\_P21\_FUSION\_HSC\_DN  
 RICCIANI\_METASTASIS\_NEUTROPHIL\_DN  
 THELGARD\_NEUTROPHIL\_SKIN\_WOUND\_UP  
 MARTENS\_SOUND\_BY\_BMSARA\_FUSION\_UP  
 MULIGHAN\_MH\_SIGNATURE\_3\_UP  
 MELCHACK\_CENTRALIZED\_HOMEOSTASIS\_UP  
 RITTELLY\_RESPONSE\_TO\_HSF\_DN  
 CHEEN\_METABOLIC\_SIGNATURE\_NFKB1N\_JL4\_DN  
 SERMON\_GROWINGENDOTHELIOVASCLES\_IN\_CANCER\_UP  
 ENAOUD\_DENDRITIC\_CELL\_MATURATION\_DN  
 BROWN\_MYELOID\_CELL\_DEVELOPMENT\_UP  
 MARTENS\_SOUND\_BY\_BMSARA\_FUSION\_UP  
 SANAR\_RESPONSE\_TNF\_RIG\_UP  
 KIMBERTON\_MH\_SIGNATURE\_2\_UP  
 TIAN\_XIANG\_TARGETS\_UP\_HOST\_DISEASE\_D7\_UP  
 TIAN\_XIANG\_FN\_RESPONSE\_NOD\_MIA\_IRF3\_UP  
 ALZHEIMER\_RESPONSE\_TO\_SF3B1\_WITH\_MECHANICAL\_VENTILATION  
 BENNETT\_SYSTEMIC\_LUPUS\_ERYTHEMATOSUS  
 NOSEN\_FNUA\_HRESPONSE  
 BOSCO\_INTERFERON\_INDUCED\_ANTIVIRAL\_MODULE  
 ENAV\_INTERFERON\_SIGNATURE\_IN\_CANCER  
 BRODIA\_NEUTROPHIL\_RESPONSE\_UP  
 ZEGRANO\_INTERFERON\_RESPONSE\_UP  
 BOWIE\_RESPONSE\_TO\_TAMOXIFEN  
 CELLULAR\_MATRIX

-28 0 28

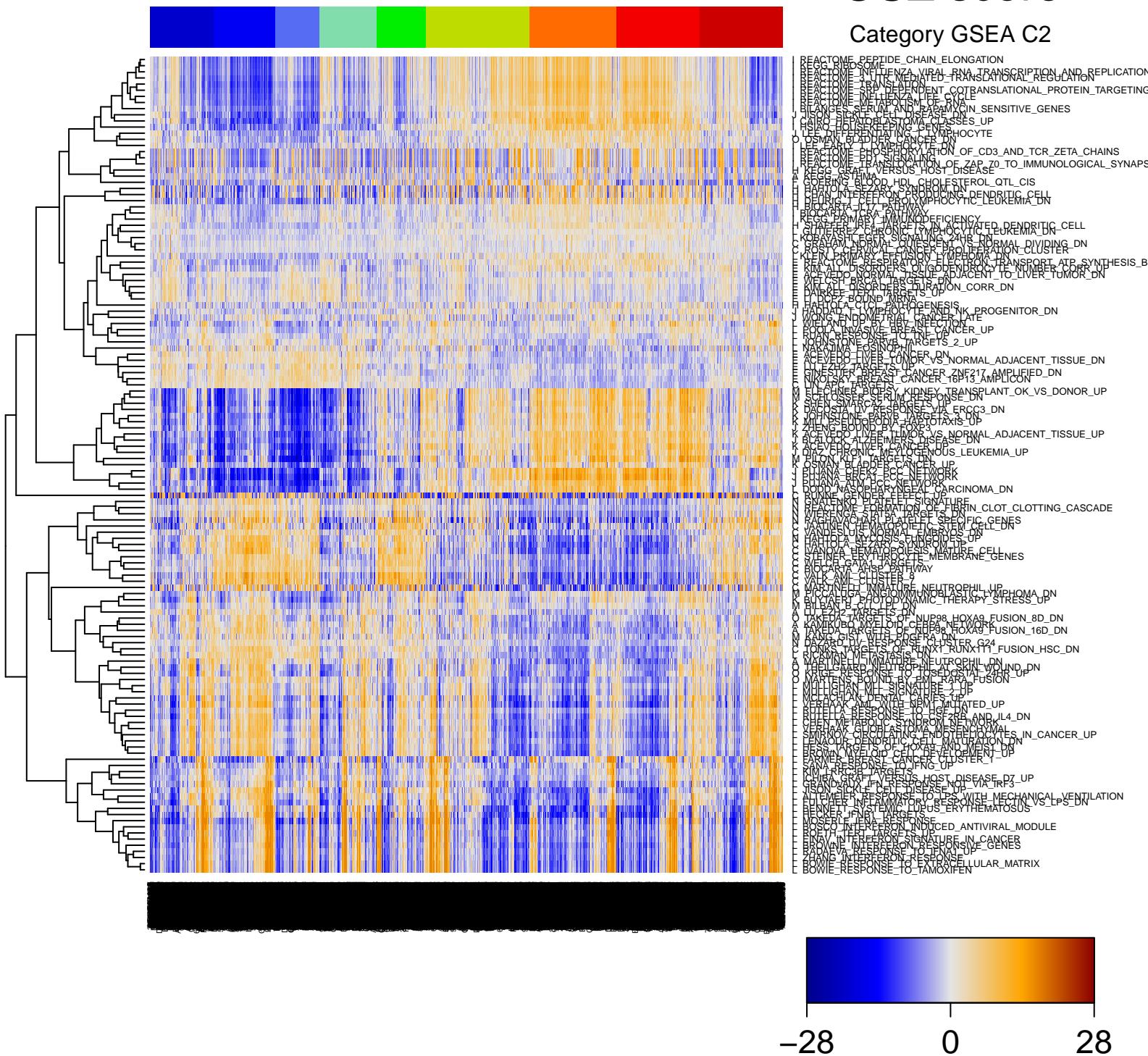
# GSZ score

## Category GSEA C2



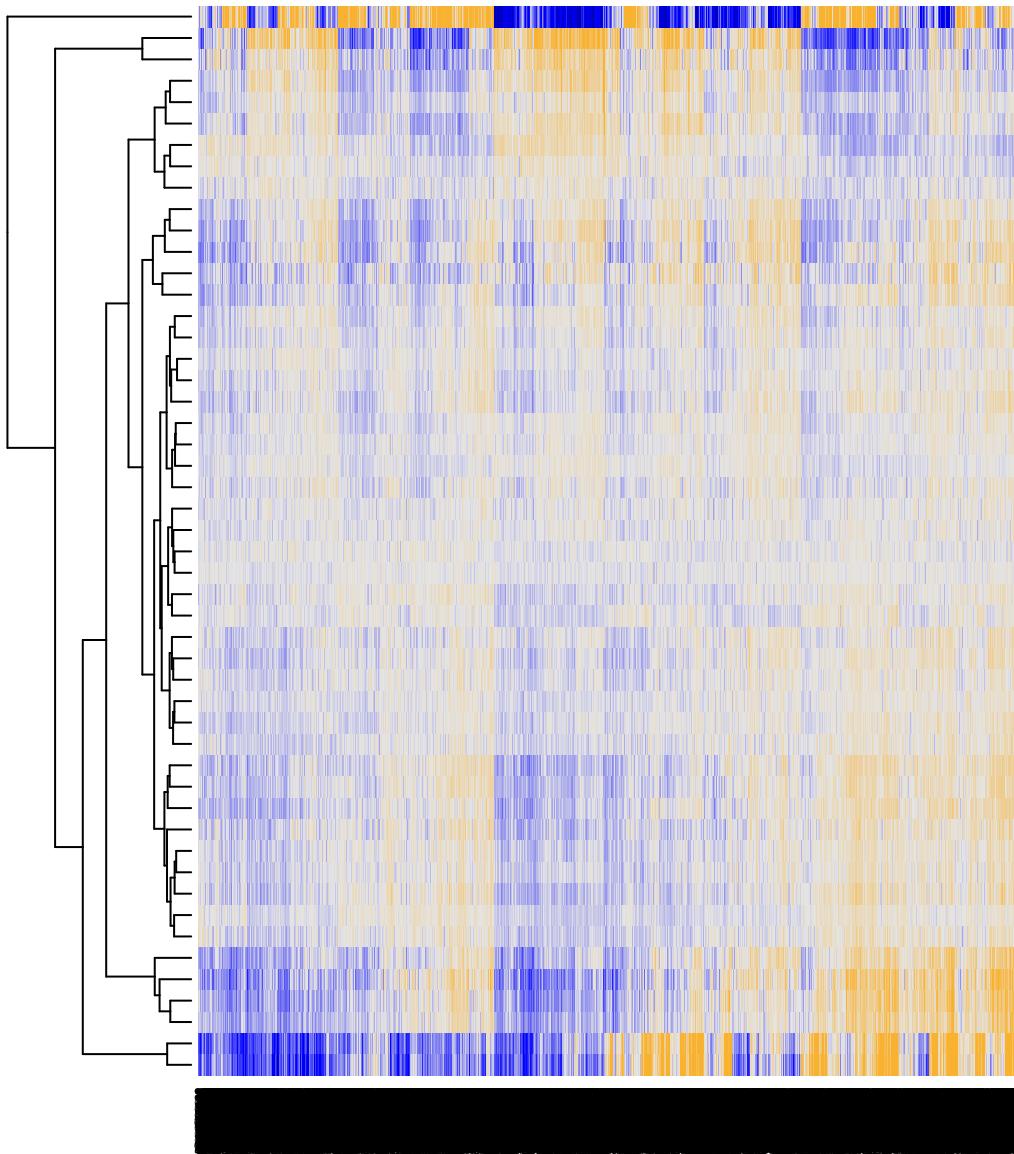
# GSZ score

## Category GSEA C2



# GSZ score

Category HM



C HALLMARK\_HEME\_METABOLISM  
J HALLMARK\_MYC\_TARGETS\_V1  
G HALLMARK\_OXIDATIVE\_PHOSPHORYLATION  
J HALLMARK\_E2F\_TARGETS  
J HALLMARK\_G2M\_CHECKPOINT  
J HALLMARK\_UNFOLDED\_PROTEIN\_RESPONSE  
J HALLMARK\_MYC\_TARGETS\_V2  
E HALLMARK\_DNA\_REPAIR  
J HALLMARK\_WNT\_BETA\_CATENIN\_SIGNALING  
N HALLMARK\_FATTY\_ACID\_METABOLISM  
M HALLMARK\_MTORC1\_SIGNALING  
K HALLMARK\_PROTEIN\_SECRETION  
H HALLMARK\_ALLOGRAFT\_REJECTION  
H HALLMARK\_IL2\_STAT5\_SIGNALING  
H HALLMARK\_UV\_RESPONSE\_DN  
M HALLMARK\_TGF\_BETA\_SIGNALING  
J HALLMARK\_ESTROGEN\_RESPONSE\_EARLY  
H HALLMARK\_ESTROGEN\_RESPONSE\_LATE  
N HALLMARK\_ANDROGEN\_RESPONSE  
H HALLMARK\_PEROXISOME  
M HALLMARK\_HEDGEHOG\_SIGNALING  
I HALLMARK\_PANCREAS\_BETA\_CELLS  
G HALLMARK\_ADIPGENESIS  
M HALLMARK\_APICAL\_SURFACE  
K HALLMARK\_MITOTIC\_SPINDLE  
N HALLMARK\_SPERMATOGENESIS  
K HALLMARK\_NOTCH\_SIGNALING  
M HALLMARK\_UV\_RESPONSE\_UP  
L HALLMARK\_KRAS\_SIGNALING\_DN  
G HALLMARK\_GLYCOLYSIS  
O HALLMARK\_P53\_PATHWAY  
N HALLMARK\_ANGIOGENESIS  
I HALLMARK\_BILE\_ACID\_METABOLISM  
K HALLMARK\_PI3K\_AKT\_MTOR\_SIGNALING  
E HALLMARK\_CHOLESTEROL\_HOMEOSTASIS  
J HALLMARK\_KRAS\_SIGNALING\_UP  
C HALLMARK\_HYPOXIA  
H HALLMARK\_APOPTOSIS  
C HALLMARK\_XENOBIOTIC\_METABOLISM  
N HALLMARK\_EPITHELIAL\_MESENCHYMAL\_TRANSITION  
N HALLMARK\_APICAL\_JUNCTION  
N HALLMARK\_COAGULATION  
N HALLMARK\_MYOGENESIS  
O HALLMARK\_REACTIVE\_OXIGEN\_SPECIES\_PATHWAY  
L HALLMARK\_COMPLETE  
O HALLMARK\_TNFA\_SIGNALING\_VIA\_NFKB  
L HALLMARK\_INFLAMMATORY\_RESPONSE  
L HALLMARK\_IL6\_JAK\_STAT3\_SIGNALING  
L HALLMARK\_INTERFERON\_GAMMA\_RESPONSE  
L HALLMARK\_INTERFERON\_ALPHA\_RESPONSE

-29 0 29

# GSZ score

Category HM

C HALLMARK\_HEME\_METABOLISM  
J HALLMARK\_MYC\_TARGETS\_V1  
G HALLMARK\_OXIDATIVE\_PHOSPHORYLATION  
J HALLMARK\_E2F\_TARGETS  
J HALLMARK\_G2M\_CHECKPOINT  
J HALLMARK\_UNFOLDED\_PROTEIN\_RESPONSE  
J HALLMARK\_MYC\_TARGETS\_V2  
E HALLMARK\_DNA\_REPAIR  
J HALLMARK\_WNT\_BETA\_CATENIN\_SIGNALING  
N HALLMARK\_FATTY\_ACID\_METABOLISM  
M HALLMARK\_MTORC1\_SIGNALING  
K HALLMARK\_PROTEIN\_SECRETION  
H HALLMARK\_ALLOGRAFT\_REJECTION  
H HALLMARK\_IL2\_STATS\_SIGNALING  
H HALLMARK\_UV\_RESPONSE\_DN  
M HALLMARK\_TGF\_BETA\_SIGNALING  
J HALLMARK\_ESTROGEN\_RESPONSE\_EARLY  
H HALLMARK\_ESTROGEN\_RESPONSE\_LATE  
N HALLMARK\_ANDROGEN\_RESPONSE  
H HALLMARK\_PEROXISOME  
M HALLMARK\_HEDGEHOG\_SIGNALING  
I HALLMARK\_PANCREAS\_BETA\_CELLS  
G HALLMARK\_ADIPOGENESIS  
M HALLMARK\_APICAL\_SURFACE  
K HALLMARK\_MITOTIC\_SPINDLE  
N HALLMARK\_SPERMATOGENESIS  
K HALLMARK\_NOTCH\_SIGNALING  
M HALLMARK\_UV\_RESPONSE\_UP  
L HALLMARK\_KRAS\_SIGNALING\_DN  
G HALLMARK\_GLYCOLYSIS  
O HALLMARK\_P53\_PATHWAY  
N HALLMARK\_ANGIOGENESIS  
I HALLMARK\_BILE\_ACID\_METABOLISM  
K HALLMARK\_PI3K\_AKT\_MTOR\_SIGNALING  
E HALLMARK\_CHOLESTEROL\_HOMEOSTASIS  
J HALLMARK\_KRAS\_SIGNALING\_UP  
C HALLMARK\_HYPOXIA  
H HALLMARK\_APOPTOSIS  
C HALLMARK\_XENOBIOTIC\_METABOLISM  
N HALLMARK\_EPITHELIAL\_MESENCHYMAL\_TRANSITION  
N HALLMARK\_APICAL\_JUNCTION  
N HALLMARK\_COAGULATION  
N HALLMARK\_MYOGENESIS  
O HALLMARK\_REACTIVE\_OXIGEN\_SPECIES\_PATHWAY  
L HALLMARK\_COMPLEMENT  
O HALLMARK\_TNFA\_SIGNALING\_VIA\_NFKB  
L HALLMARK\_INFLAMMATORY\_RESPONSE  
L HALLMARK\_IL6\_JAK\_STAT3\_SIGNALING  
L HALLMARK\_INTERFERON\_GAMMA\_RESPONSE  
L HALLMARK\_INTERFERON\_ALPHA\_RESPONSE

-29 0 29

# GSZ score

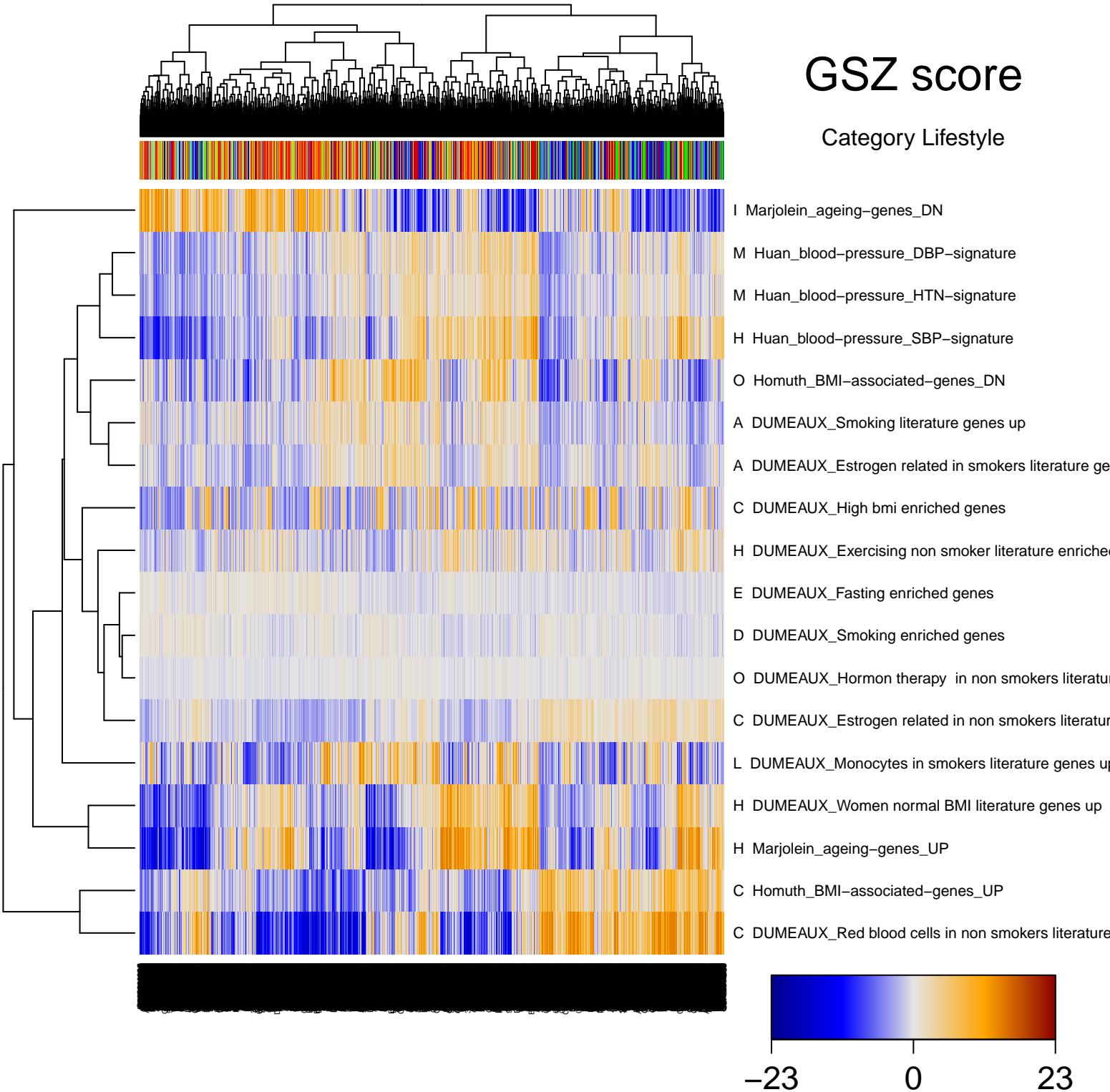
Category HM

- 
- C HALLMARK\_HEME\_METABOLISM  
J HALLMARK\_MYC\_TARGETS\_V1  
G HALLMARK\_OXIDATIVE\_PHOSPHORYLATION  
J HALLMARK\_E2F\_TARGETS  
J HALLMARK\_G2M\_CHECKPOINT  
J HALLMARK\_UNFOLDED\_PROTEIN\_RESPONSE  
J HALLMARK\_MYC\_TARGETS\_V2  
E HALLMARK\_DNA\_REPAIR  
J HALLMARK\_WNT\_BETA\_CATENIN\_SIGNALING  
N HALLMARK\_FATTY\_ACID\_METABOLISM  
M HALLMARK\_MTORC1\_SIGNALING  
K HALLMARK\_PROTEIN\_SECRETION  
H HALLMARK\_ALLOGRAFT\_REJECTION  
H HALLMARK\_IL2\_STATS\_SIGNALING  
H HALLMARK\_UV\_RESPONSE\_DN  
M HALLMARK\_TGF\_BETA\_SIGNALING  
J HALLMARK\_ESTROGEN\_RESPONSE\_EARLY  
H HALLMARK\_ESTROGEN\_RESPONSE\_LATE  
N HALLMARK\_ANDROGEN\_RESPONSE  
H HALLMARK\_PEROXISOME  
M HALLMARK\_HEDGEHOG\_SIGNALING  
I HALLMARK\_PANCREAS\_BETA\_CELLS  
G HALLMARK\_ADIPOGENESIS  
M HALLMARK\_APICAL\_SURFACE  
K HALLMARK\_MITOTIC\_SPINDLE  
N HALLMARK\_SPERMATOGENESIS  
K HALLMARK\_NOTCH\_SIGNALING  
M HALLMARK\_UV\_RESPONSE\_UP  
L HALLMARK\_KRAS\_SIGNALING\_DN  
G HALLMARK\_GLYCOLYSIS  
O HALLMARK\_P53\_PATHWAY  
N HALLMARK\_ANGIOGENESIS  
I HALLMARK\_BILE\_ACID\_METABOLISM  
K HALLMARK\_PI3K\_AKT\_MTOR\_SIGNALING  
E HALLMARK\_CHOLESTEROL\_HOMEOSTASIS  
J HALLMARK\_KRAS\_SIGNALING\_UP  
C HALLMARK\_HYPOXIA  
H HALLMARK\_APOPTOSIS  
C HALLMARK\_XENOBIOTIC\_METABOLISM  
N HALLMARK\_EPITHELIAL\_MESENCHYMAL\_TRANSITION  
N HALLMARK\_APICAL\_JUNCTION  
N HALLMARK\_COAGULATION  
N HALLMARK\_MYOGENESIS  
O HALLMARK\_REACTIVE\_OXIGEN\_SPECIES\_PATHWAY  
L HALLMARK\_COMPLEMENT  
O HALLMARK\_TNFA\_SIGNALING\_VIA\_NFKB  
L HALLMARK\_INFLAMMATORY\_RESPONSE  
L HALLMARK\_IL6\_JAK\_STAT3\_SIGNALING  
L HALLMARK\_INTERFERON\_GAMMA\_RESPONSE  
L HALLMARK\_INTERFERON\_ALPHA\_RESPONSE

-29 0 29

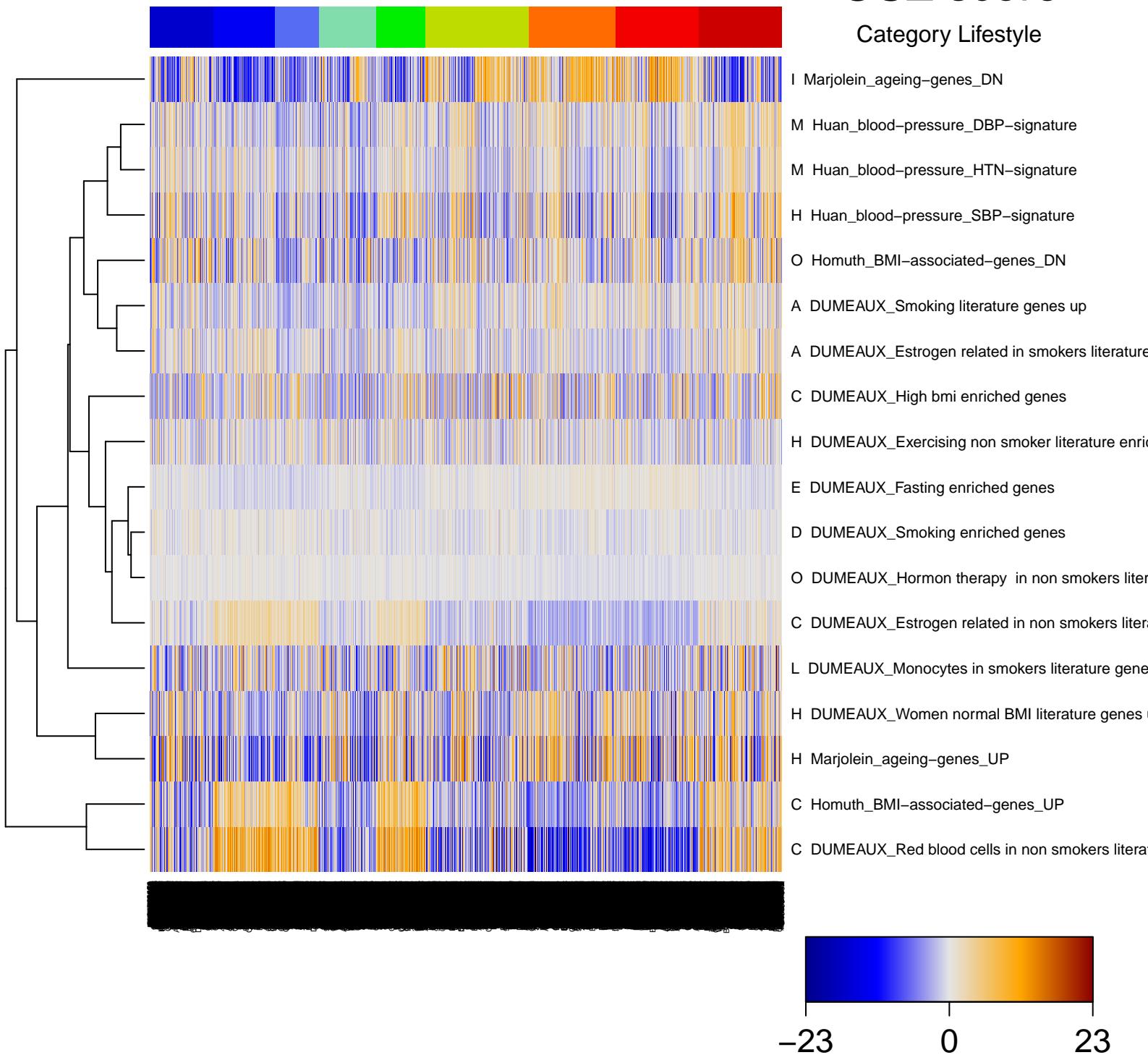
# GSZ score

Category Lifestyle



# GSZ score

Category Lifestyle

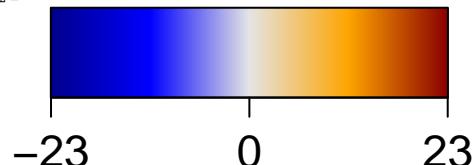


# GSZ score

Category Lifestyle

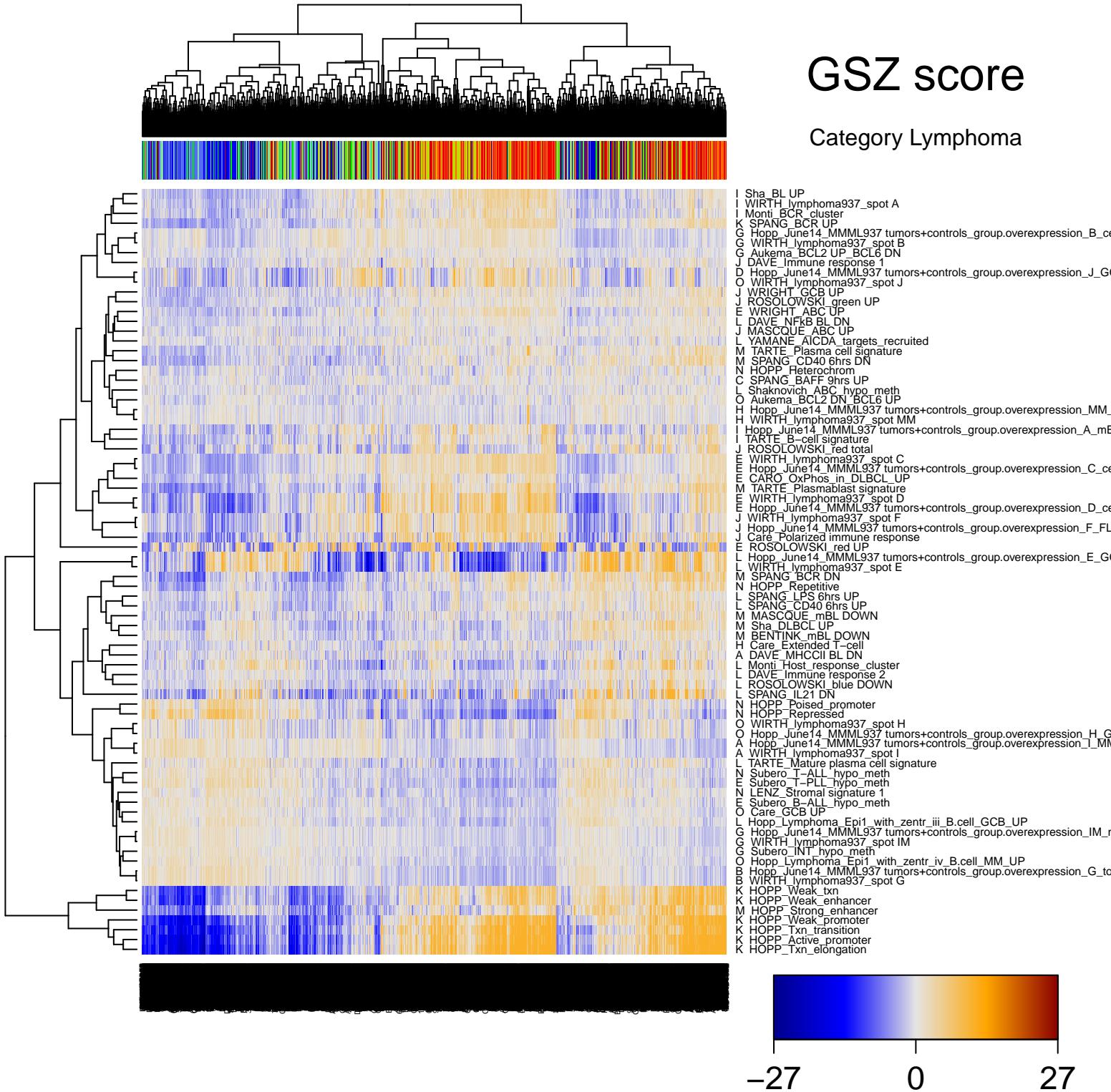


- I Marjolein\_ageing-genes\_DN
- M Huan\_blood-pressure\_DBP-signature
- M Huan\_blood-pressure\_HTN-signature
- H Huan\_blood-pressure\_SBP-signature
- O Homuth\_BMI-associated-genes\_DN
- A DUMEAUX\_Smoking literature genes up
- A DUMEAUX\_Estrogen related in smokers literature
- C DUMEAUX\_High bmi enriched genes
- H DUMEAUX\_Exercising non smoker literature enriched
- E DUMEAUX\_Fasting enriched genes
- D DUMEAUX\_Smoking enriched genes
- O DUMEAUX\_Hormon therapy in non smokers literature
- C DUMEAUX\_Estrogen related in non smokers literature
- L DUMEAUX\_Monocytes in smokers literature genes
- H DUMEAUX\_Women normal BMI literature genes
- H Marjolein\_ageing-genes\_UP
- C Homuth\_BMI-associated-genes\_UP
- C DUMEAUX\_Red blood cells in non smokers literature



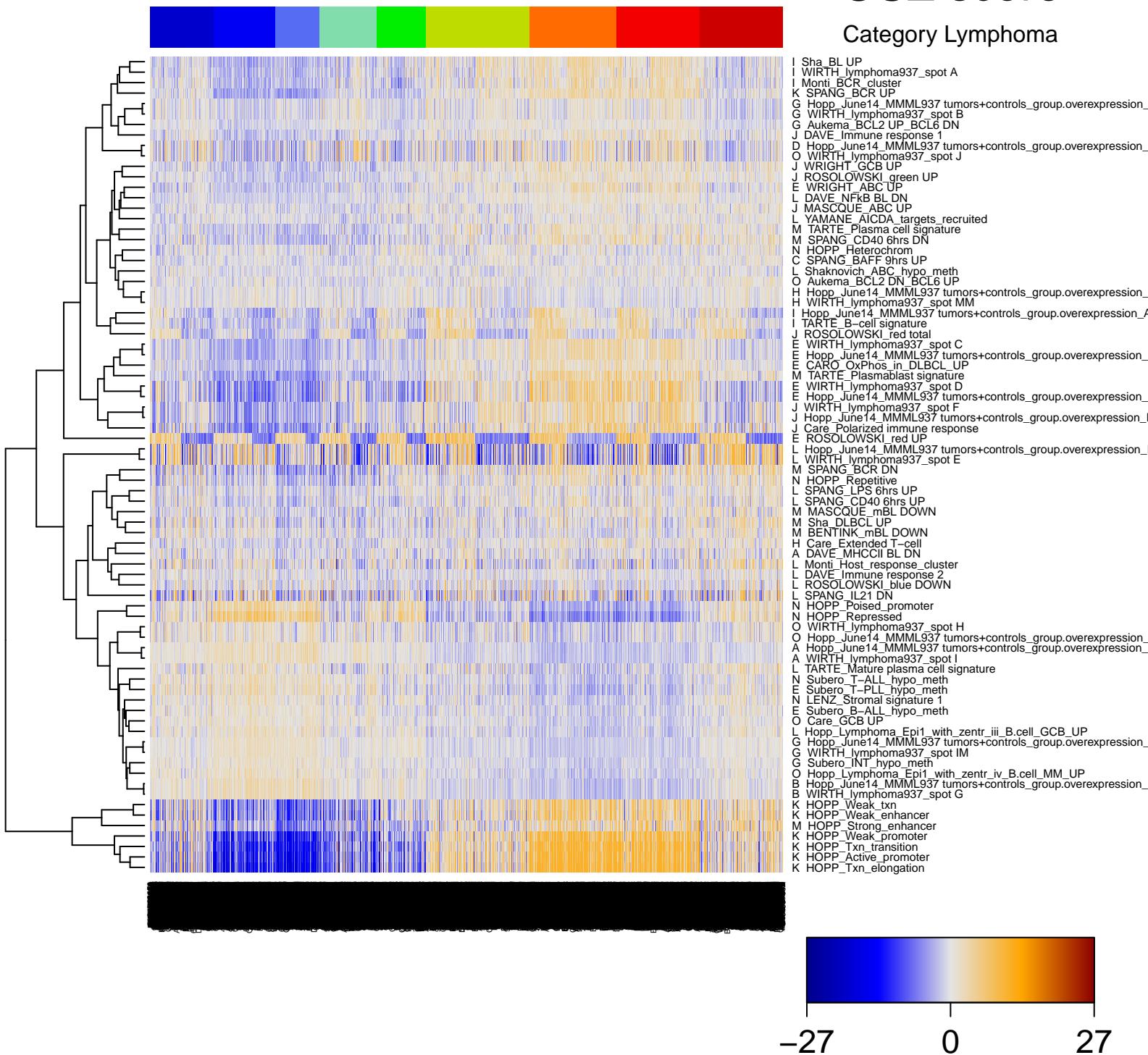
# GSZ score

Category Lymphoma



# GSZ score

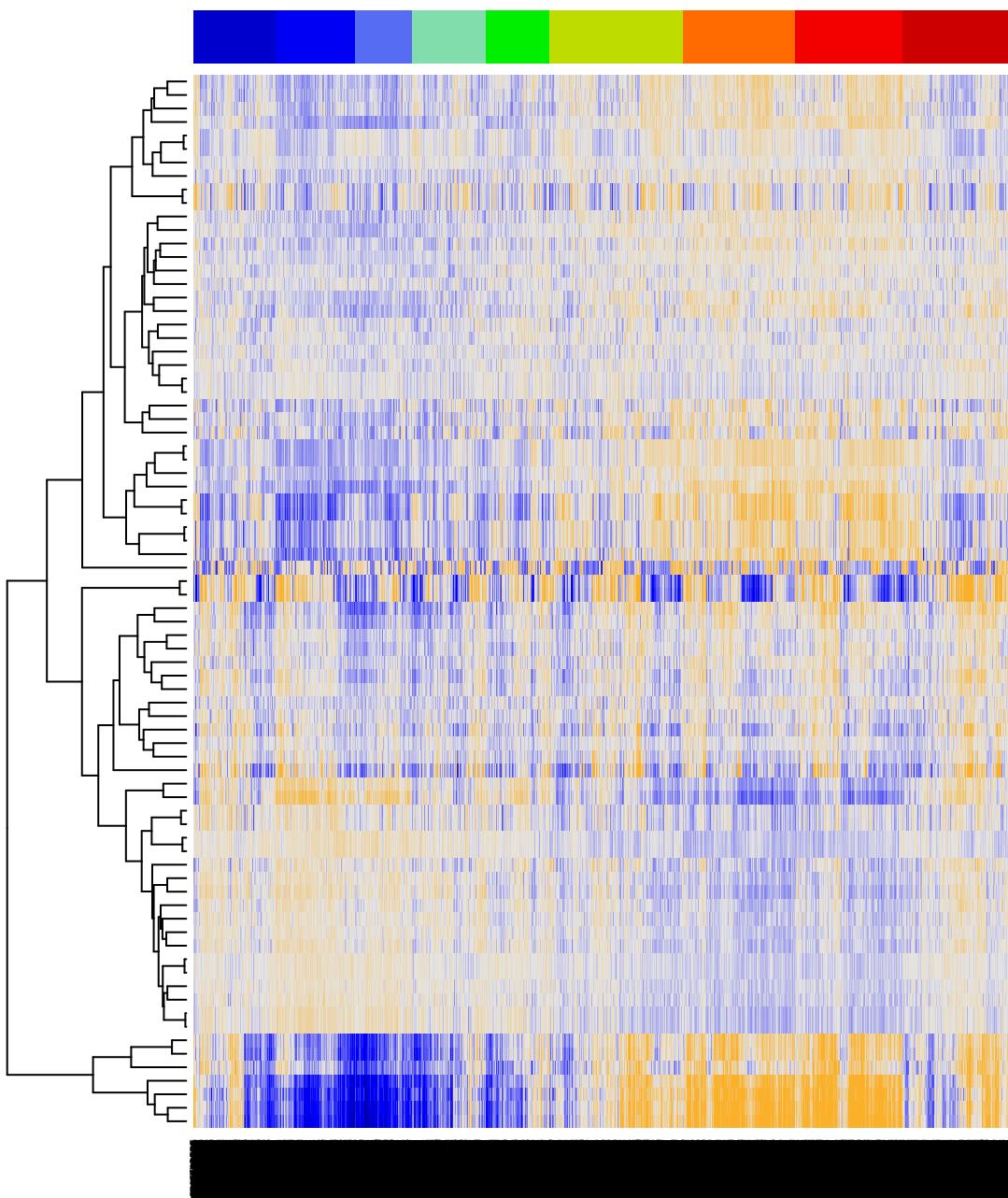
Category Lymphoma



# GSZ score

Category Lymphoma

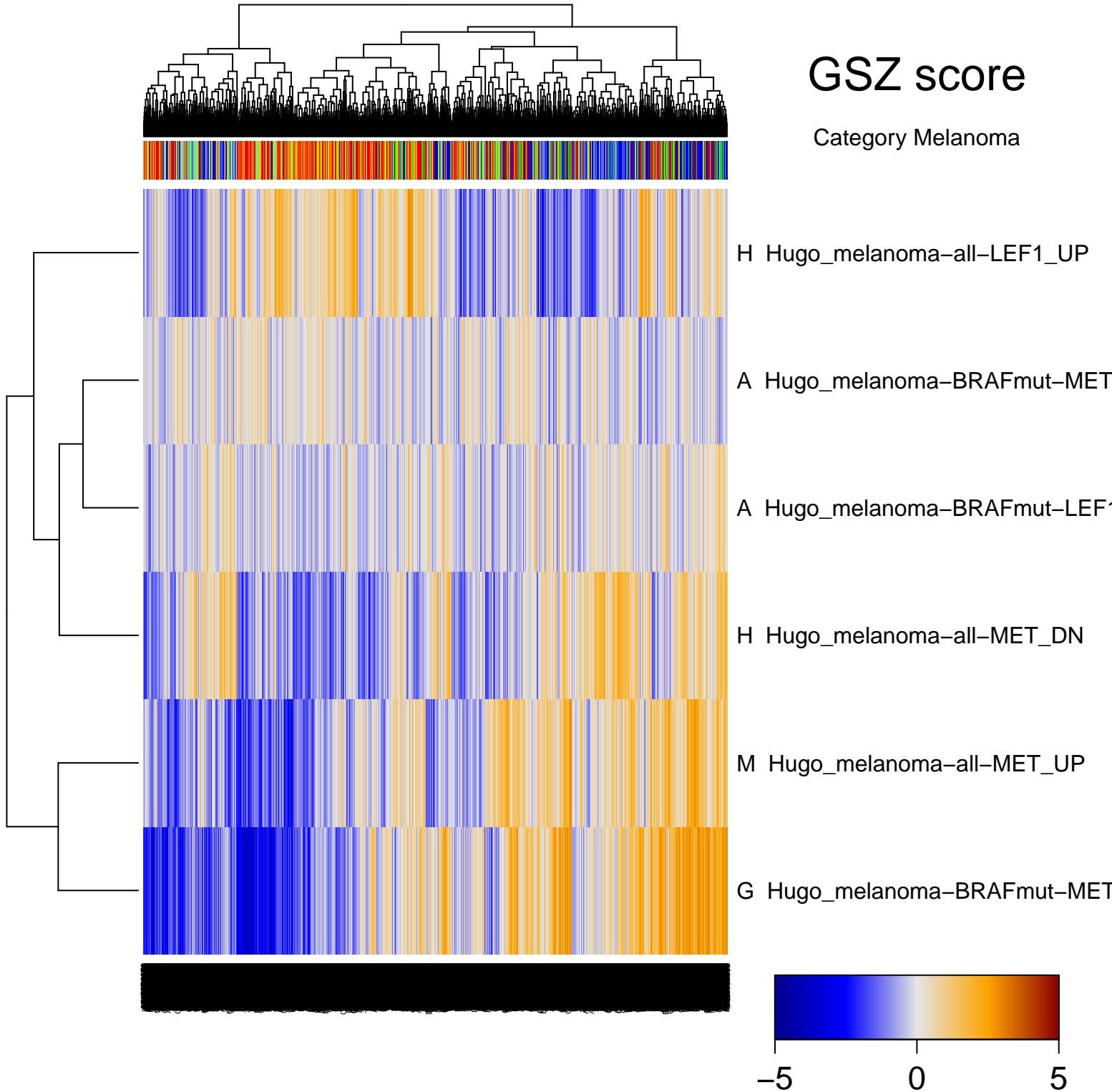
I	Sha_BL_UP
I	WIRTH_lymphoma937_spot_A
X	Monti_BCR_cluster
X	SPANG_BCR_UP
G	Hopp_June14_MMML937_tumors+controls_group.overexpression_
G	WIRTH_lymphoma937_spot_B
J	DAVE_Immune_response_1
D	Hopp_June14_MMML937_tumors+controls_group.overexpression_
O	WIRTH_lymphoma937_spot_J
J	WRIGHT_GCB_UP
J	ROSOLOWSKI_green_UP
J	DAVE_NFKB_BL_DN
E	WRIGHT_ABC_UP
L	MASCQUE_ABC_UP
L	YAMANE_AICDA_targets_recruited
M	TARTE_Plasma_cell_signature
M	SPANG_CD40_6hrs_DN
N	HOPP_Heterochrom
C	SPANG_BAFF_9hrs_UP
L	Shaknovich_ABC_hypo_meth
O	Aukema_BCL2_DN_BCL6_UP
H	Hopp_June14_MMML937_tumors+controls_group.overexpression_
H	WIRTH_lymphoma937_spot_MM
I	Hopp_June14_MMML937_tumors+controls_group.overexpression_A
I	TARTE_B-cell_signature
J	ROSOLOWSKI_red_total
J	WIRTH_lymphoma937_spot_C
E	Hopp_June14_MMML937_tumors+controls_group.overexpression_E
E	CARO_OxPhos_in_DLBCI_UP
M	TARTE_Plasmablast_signature
E	WIRTH_lymphoma937_spot_D
H	Hopp_June14_MMML937_tumors+controls_group.overexpression_
J	WIRTH_lymphoma937_spot_F
J	Hopp_June14_MMML937_tumors+controls_group.overexpression_F
C	Care_Polarized immune response
E	ROSOLOWSKI_red_UP
L	Hopp_June14_MMML937_tumors+controls_group.overexpression_L
L	WIRTH_lymphoma937_spot_E
M	SPANG_BCR_DN
N	HOPP_Repetitive
L	SPANG_LPS_6hrs_UP
L	SPANG_CD40_6hrs_UP
M	MASCQUE_mB_DOWN
M	Sha_DLBCI_UP
M	BENTINK_mB_DOWN
H	Care_Extended_T-cell
A	DAVE_MHCCI_BL_DN
L	Monti_Host_response_cluster
L	DAVE_Immune_response_2
L	ROSOLOWSKI_blue_DOWN
L	SPANG_IL21_DN
N	HOPP_Poised_promoter
N	HOPP_Repressed
O	WIRTH_lymphoma937_spot_H
O	Hopp_June14_MMML937_tumors+controls_group.overexpression_
A	Hopp_June14_MMML937_tumors+controls_group.overexpression_A
A	WIRTH_lymphoma937_spot_I
L	TARTE_Mature_plasma_cell_signature
N	Subero_T-ALL_hypo_meth
E	Subero_T-PLL_hypo_meth
N	LENZ_Stromal_signature_1
E	Subero_B-ALL_hypo_meth
C	Care_GCB_UP
L	Hopp_Lymphoma_Epi1_with_zentr_iii_B.cell_GCB_UP
G	Hopp_June14_MMML937_tumors+controls_group.overexpression_G
G	WIRTH_lymphoma937_spot_IM
G	Subero_INT_hypo_meth
O	Hopp_Lymphoma_Epi1_with_zentr_iv_B.cell_MM_UP
B	Hopp_June14_MMML937_tumors+controls_group.overexpression_B
B	WIRTH_lymphoma937_spot_G
K	HOPP_Weak_txn
K	HOPP_Weak_enhancer
M	HOPP_Strong_enhancer
K	HOPP_Weak_promoter
K	HOPP_Txn_transition
K	HOPP_Active_promoter
K	HOPP_Elongation



-27 0 27

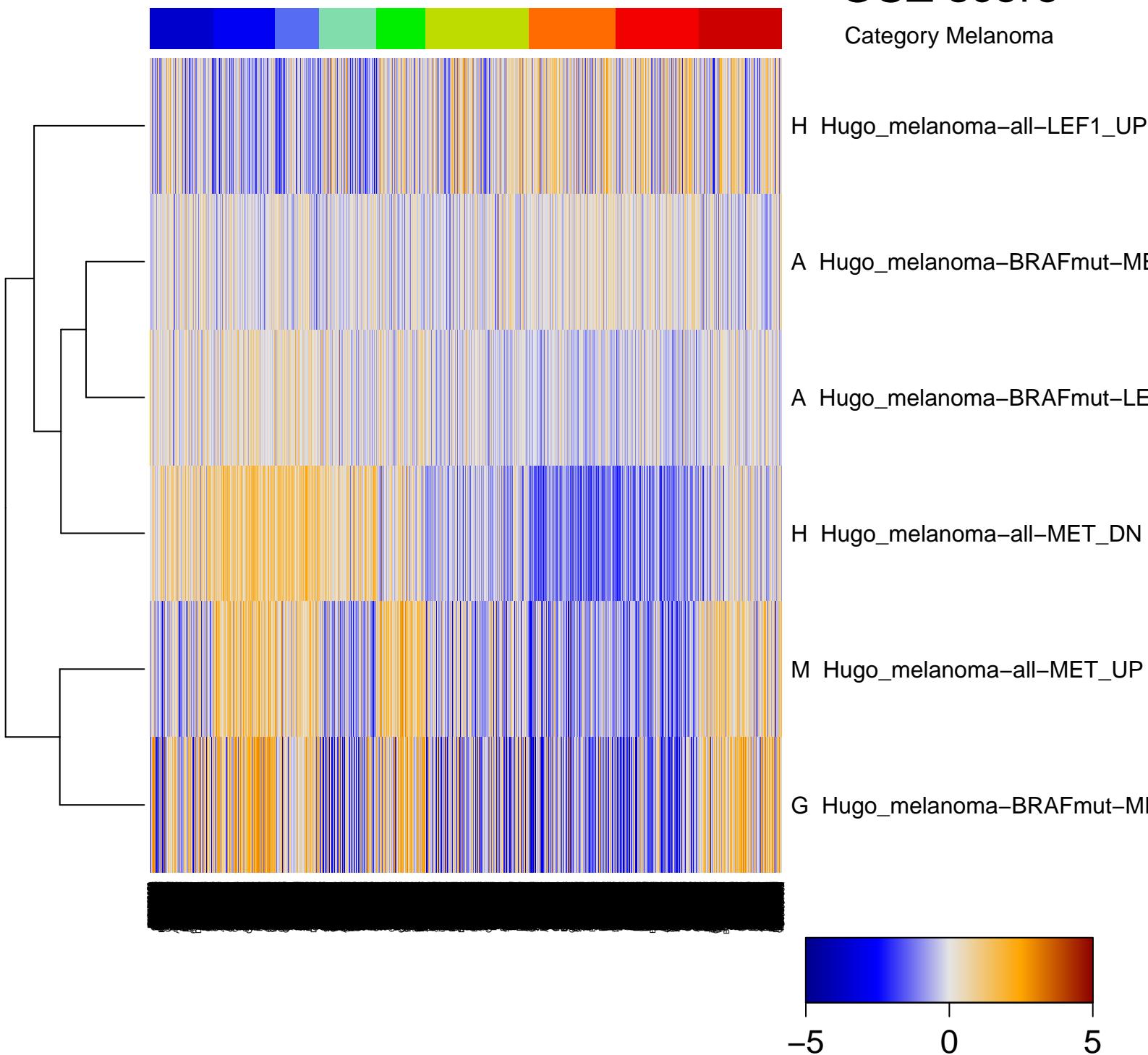
# GSZ score

Category Melanoma



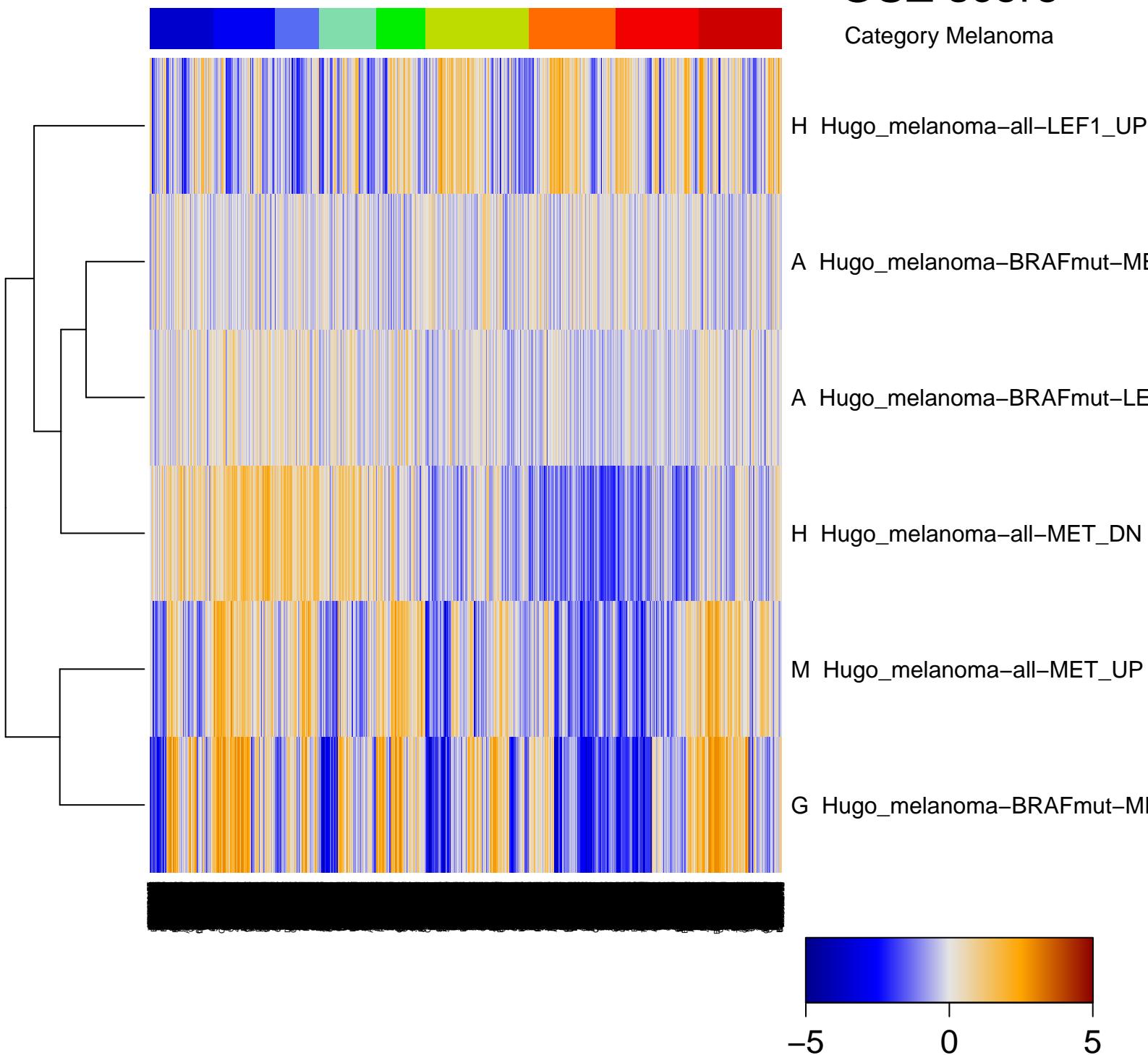
# GSZ score

Category Melanoma



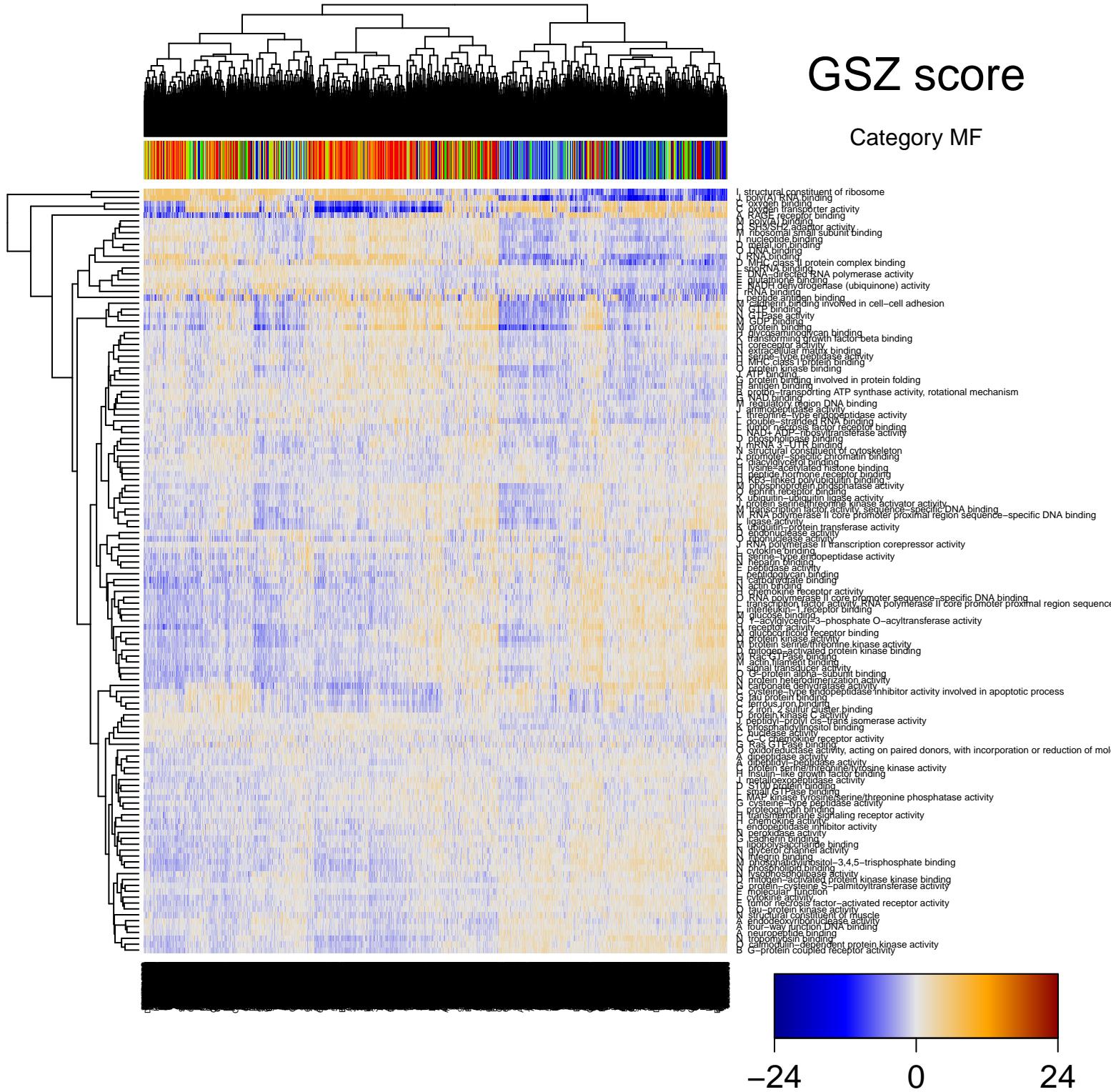
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Category Melanoma



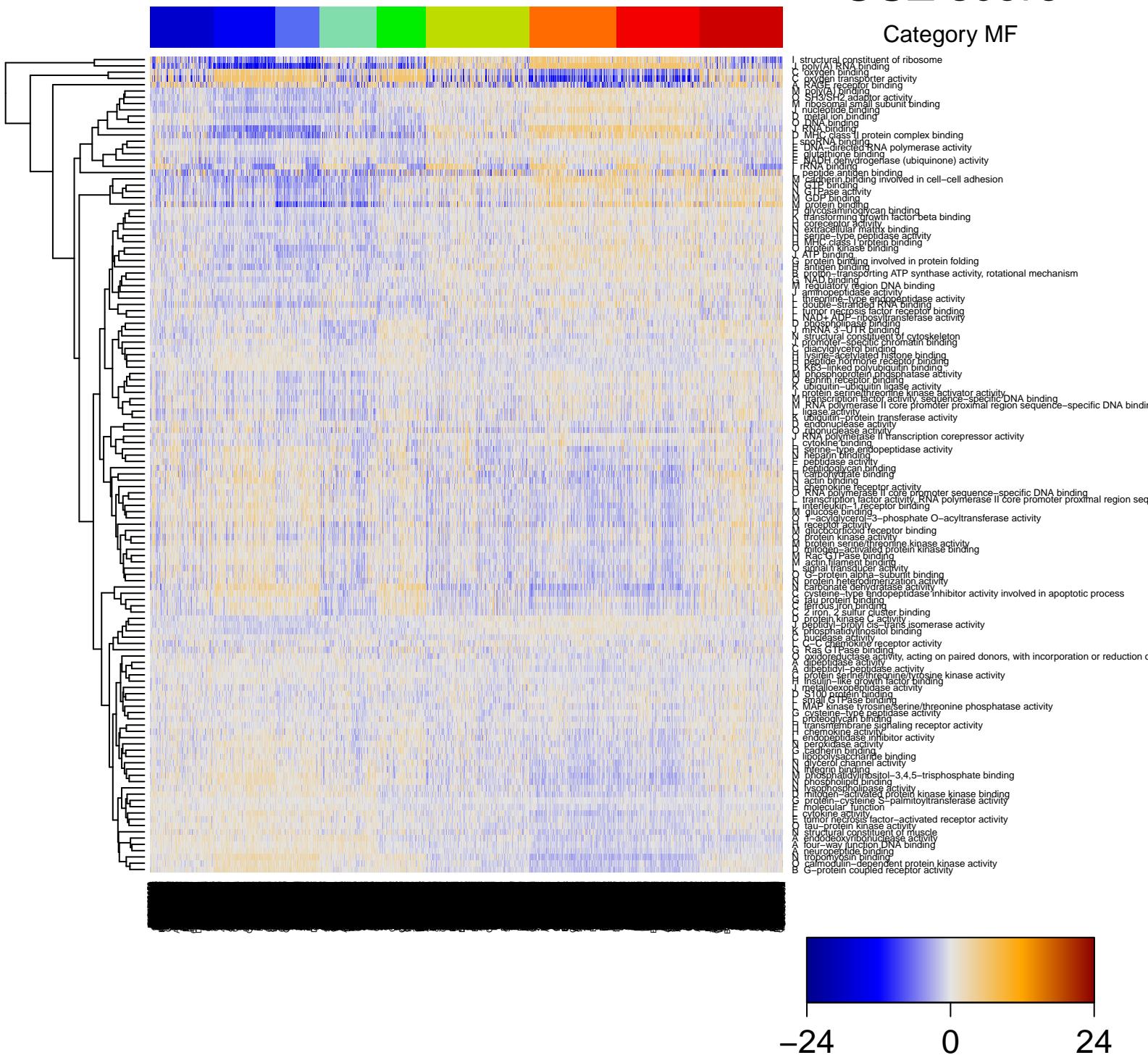
# GSZ score

Category MF



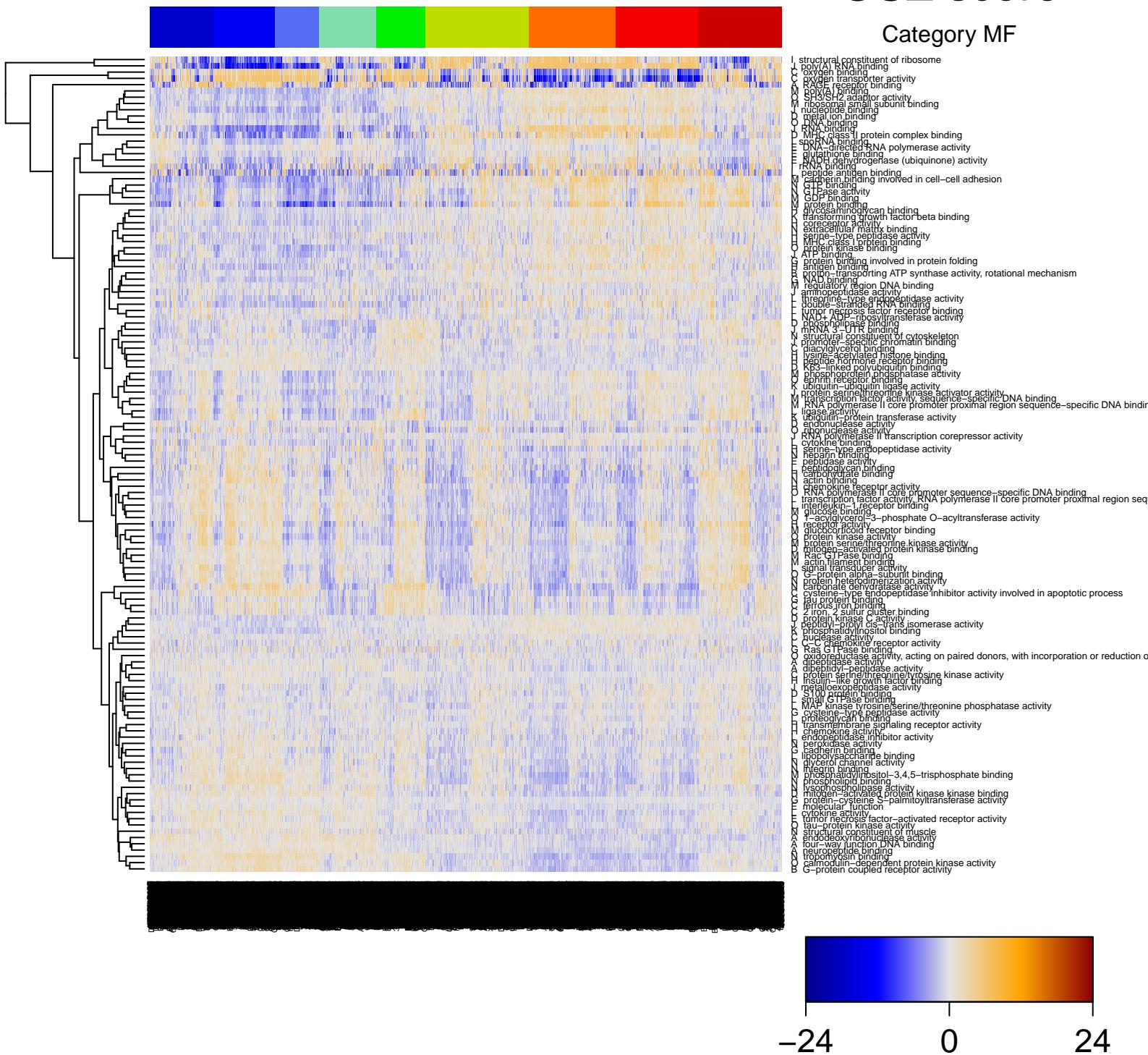
# GSZ score

Category MF



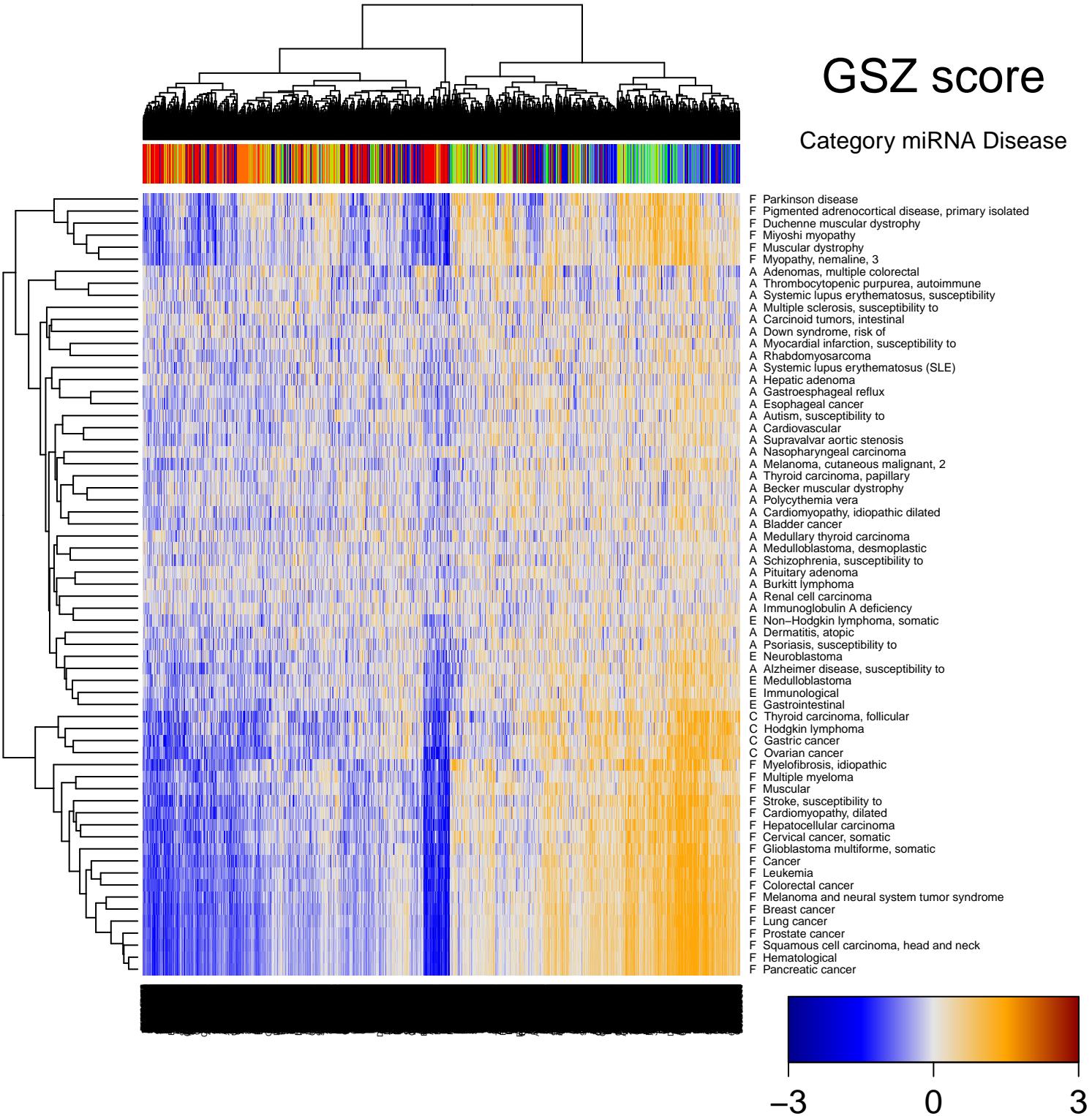
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Category MF

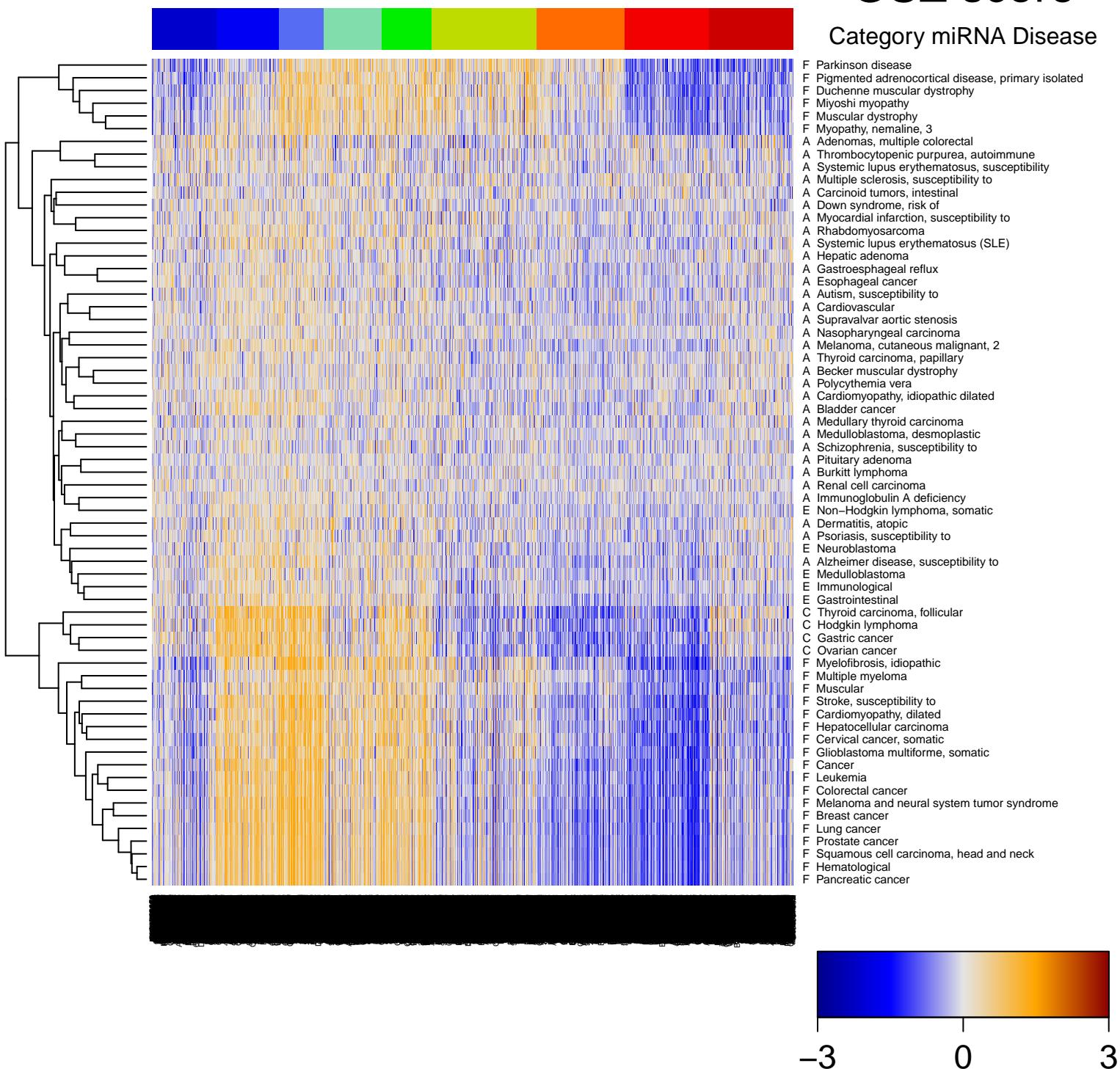


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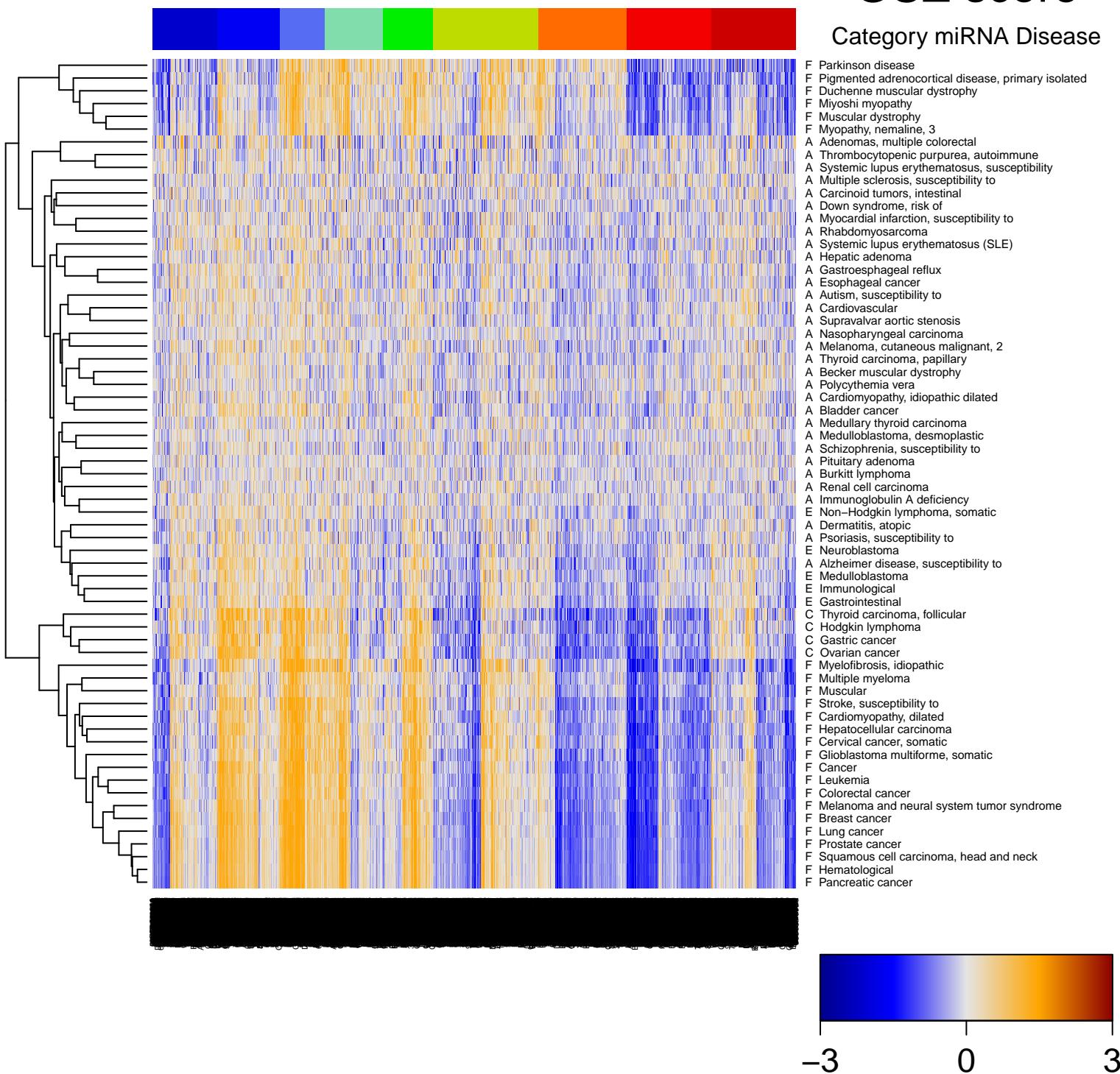
Category miRNA Disease

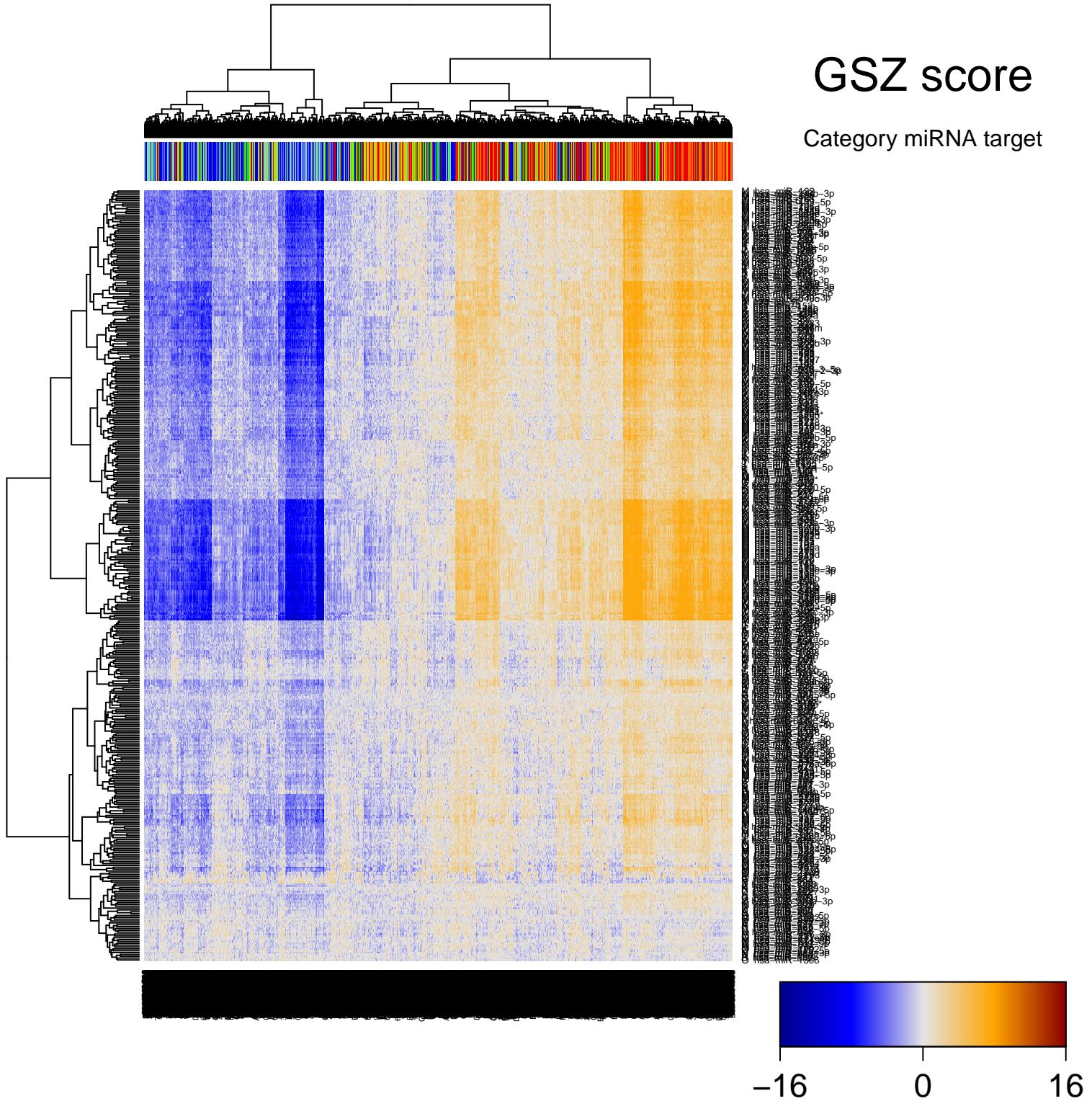


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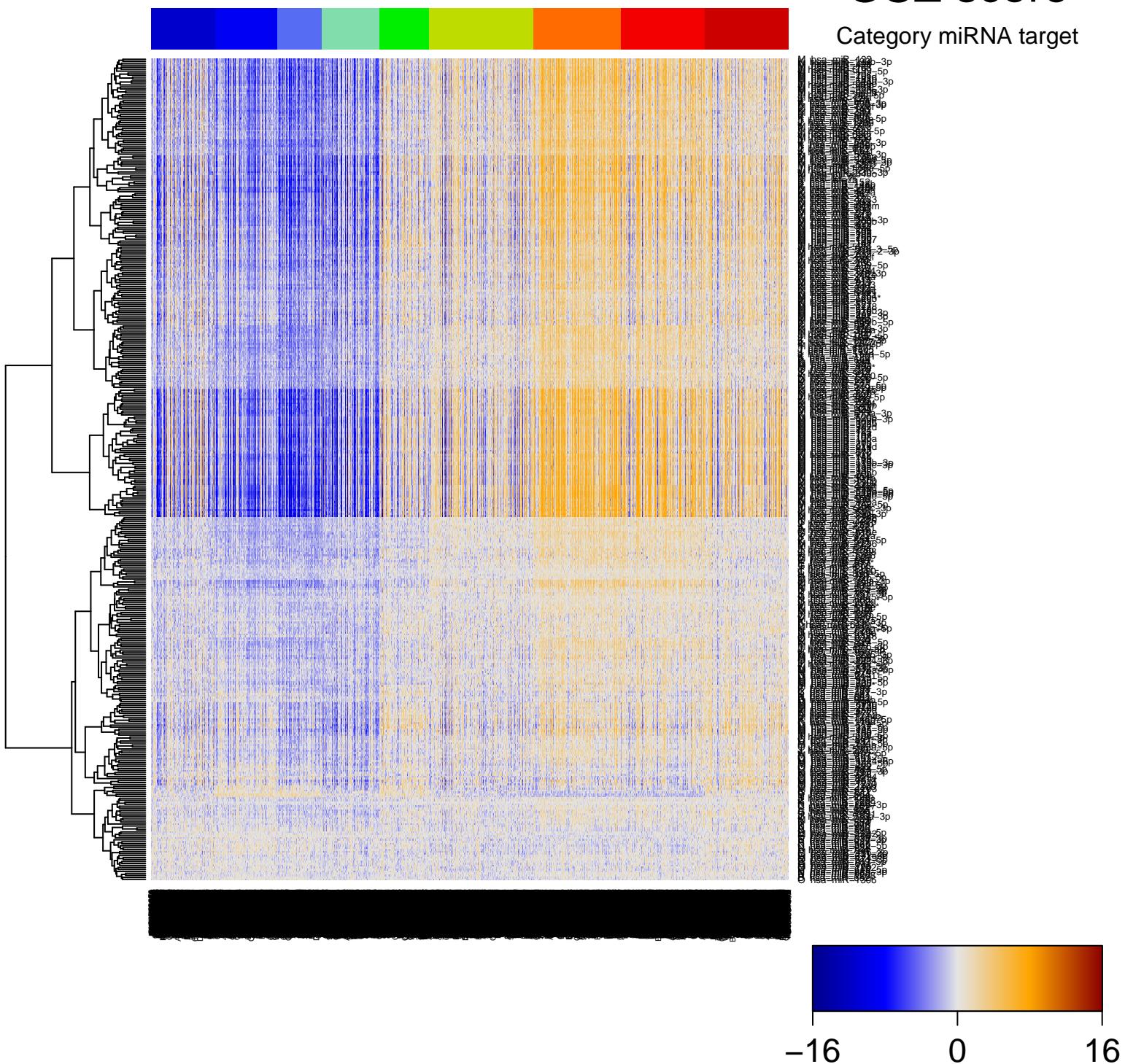
# GSZ score





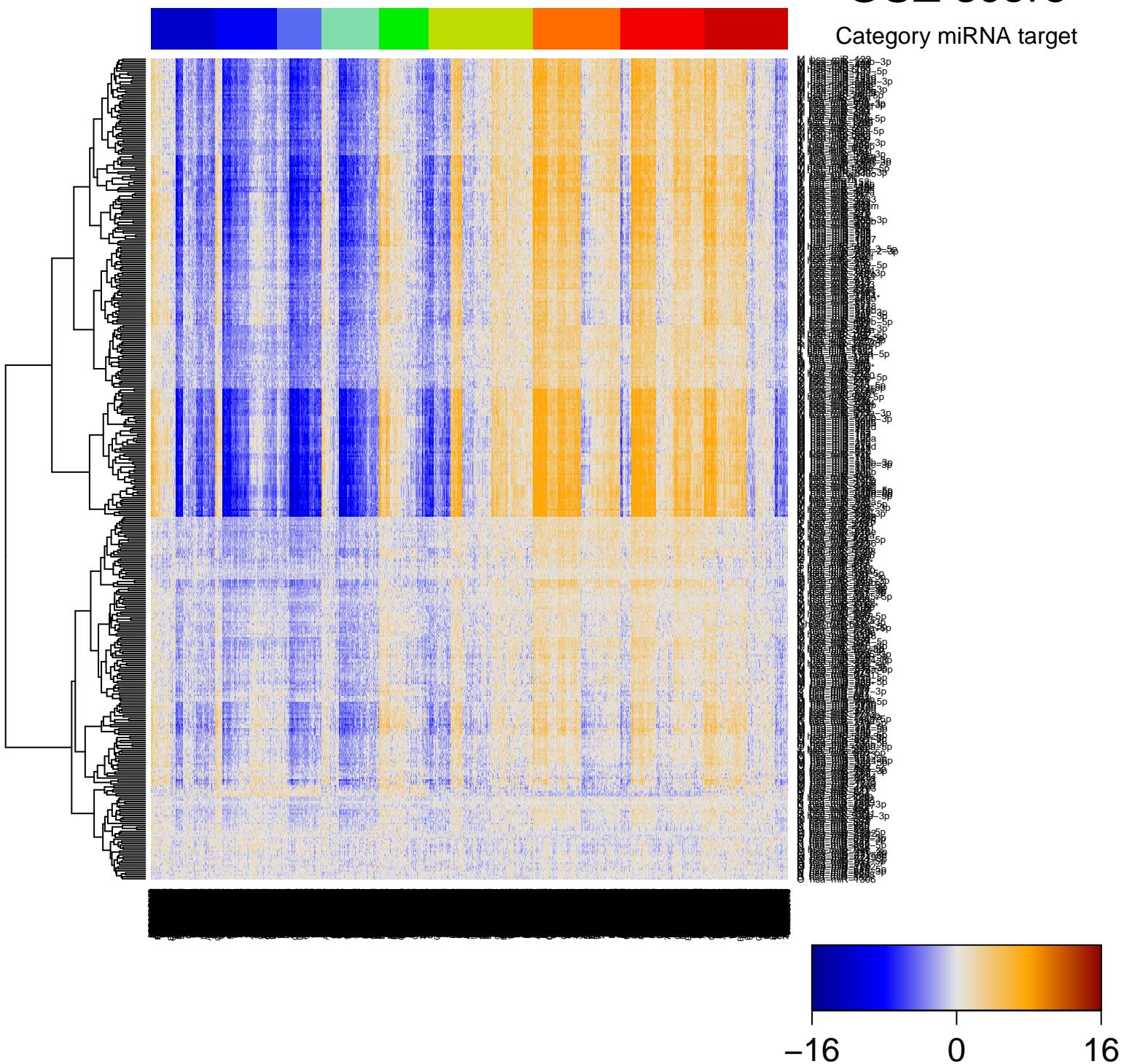
## GSZ score

## Category miRNA target



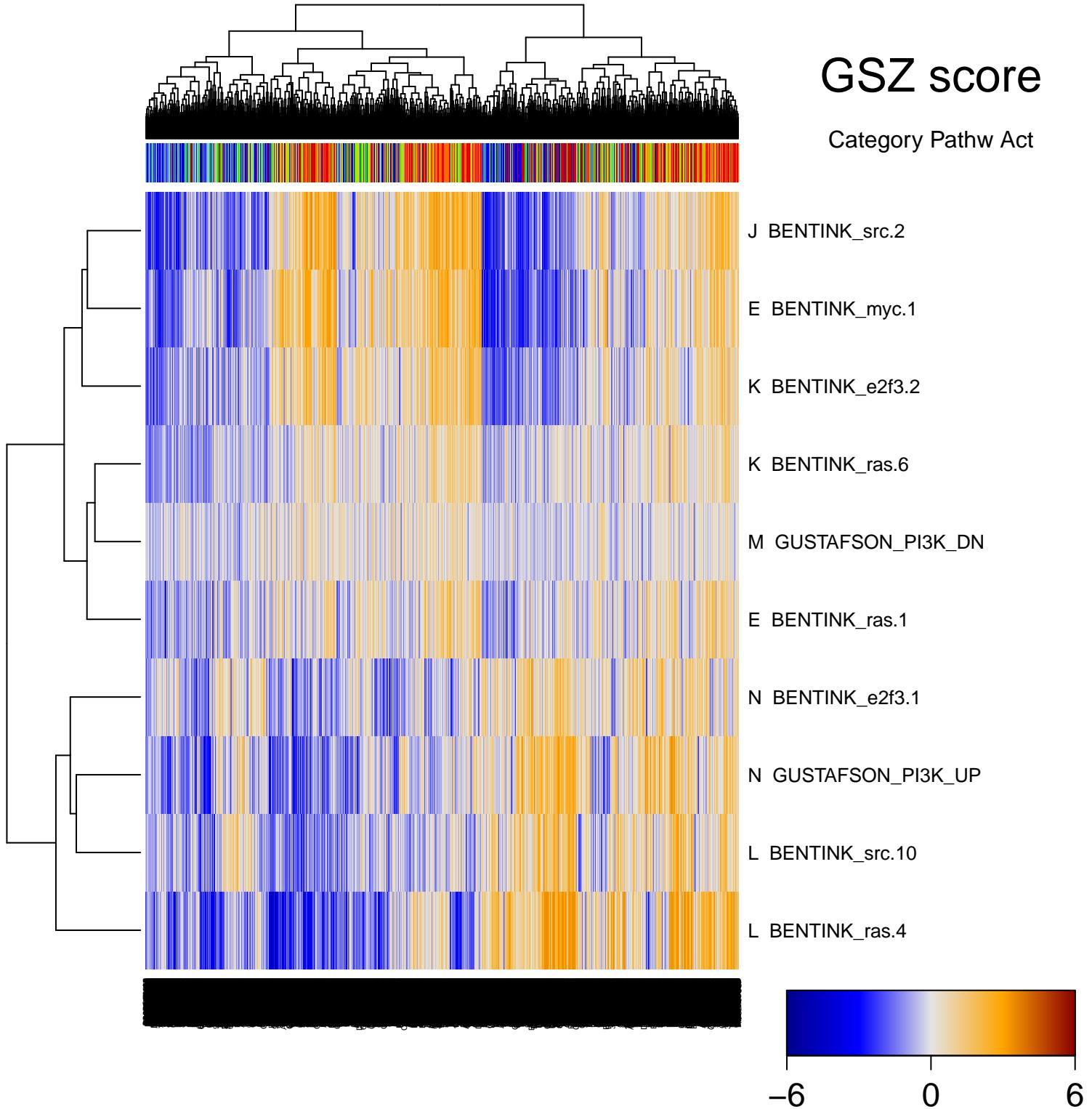
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Category miRNA target



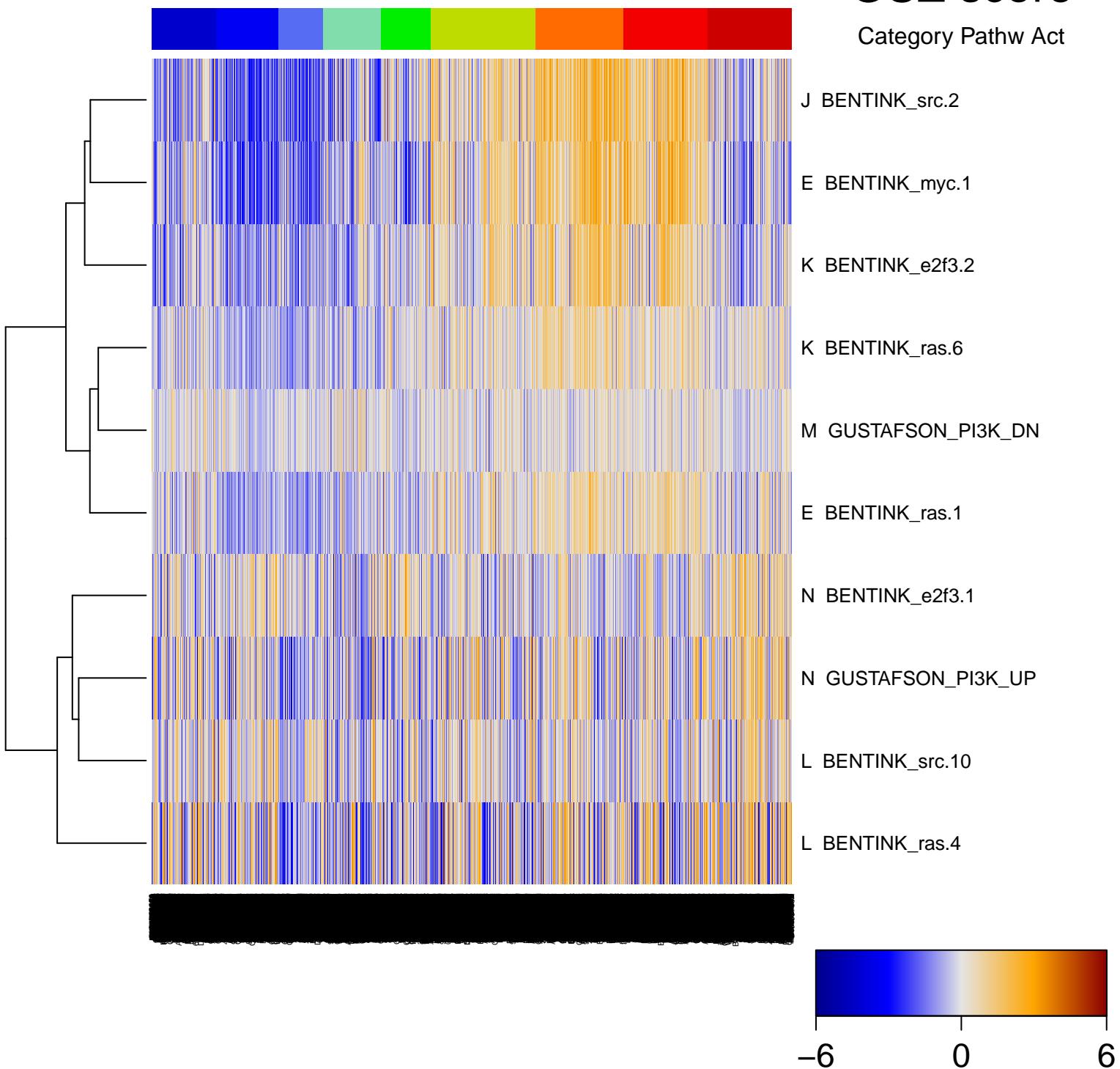
# GSZ score

Category Pathw Act



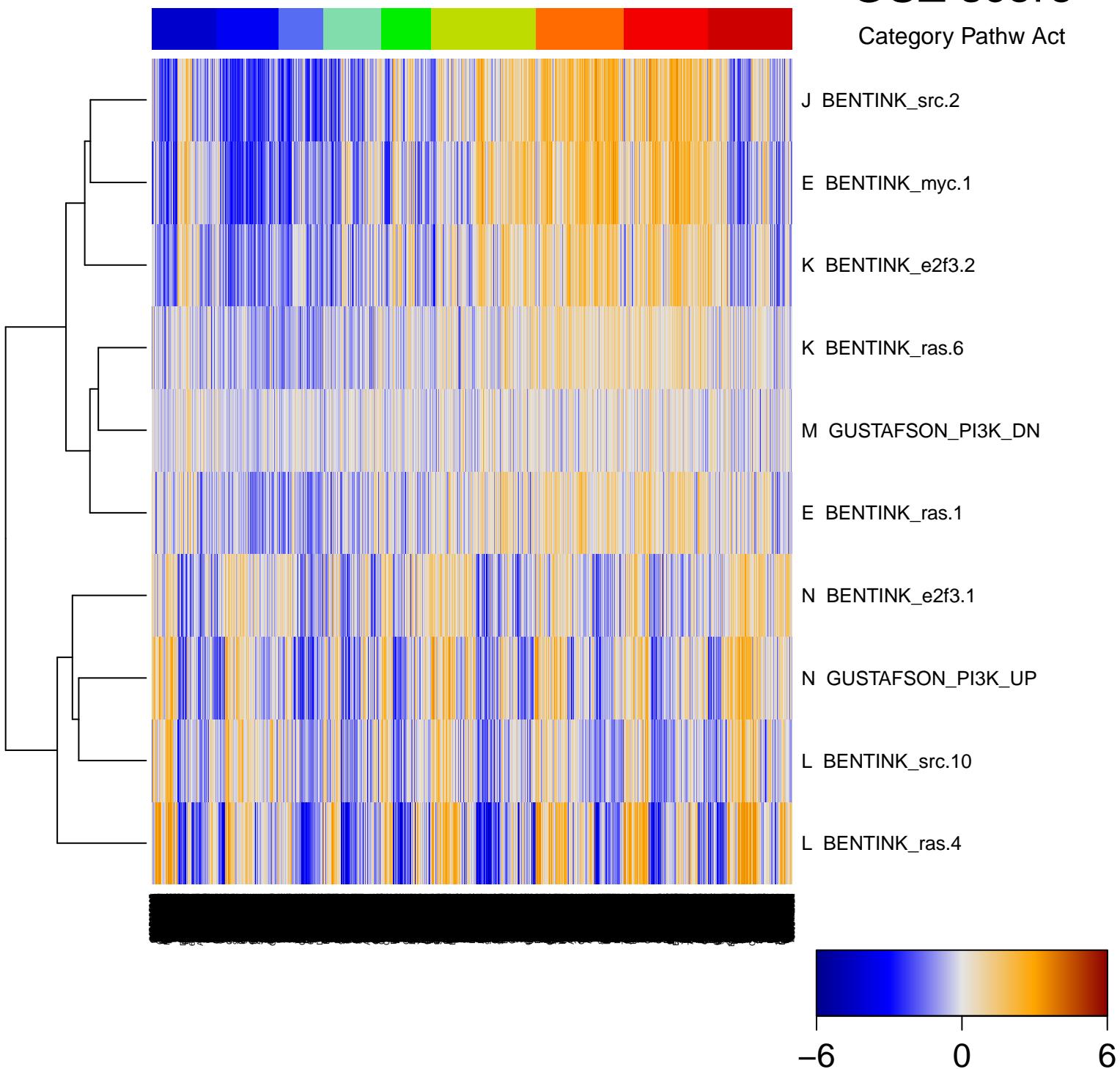
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Category Pathw Act



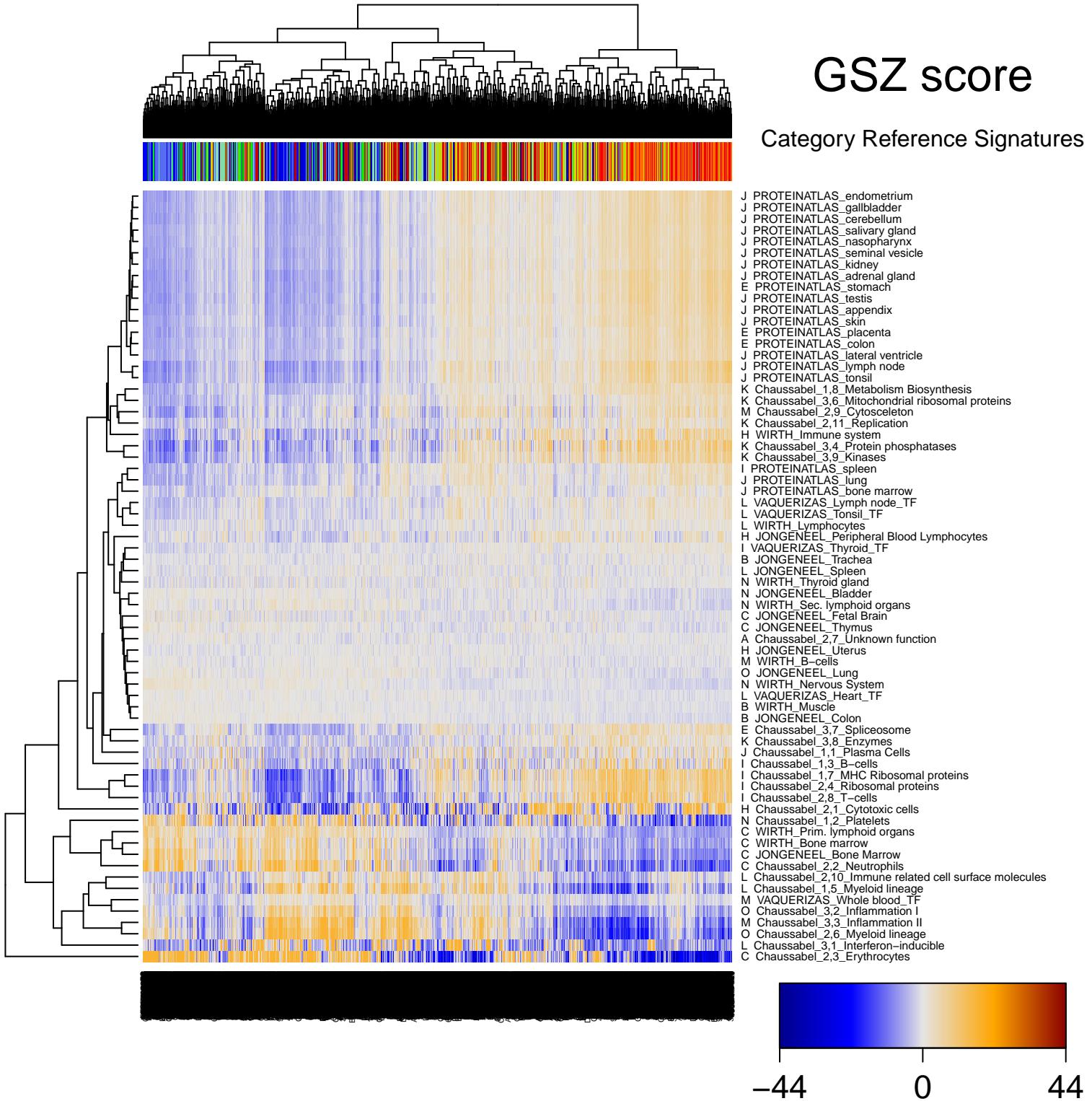
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Category Pathw Act

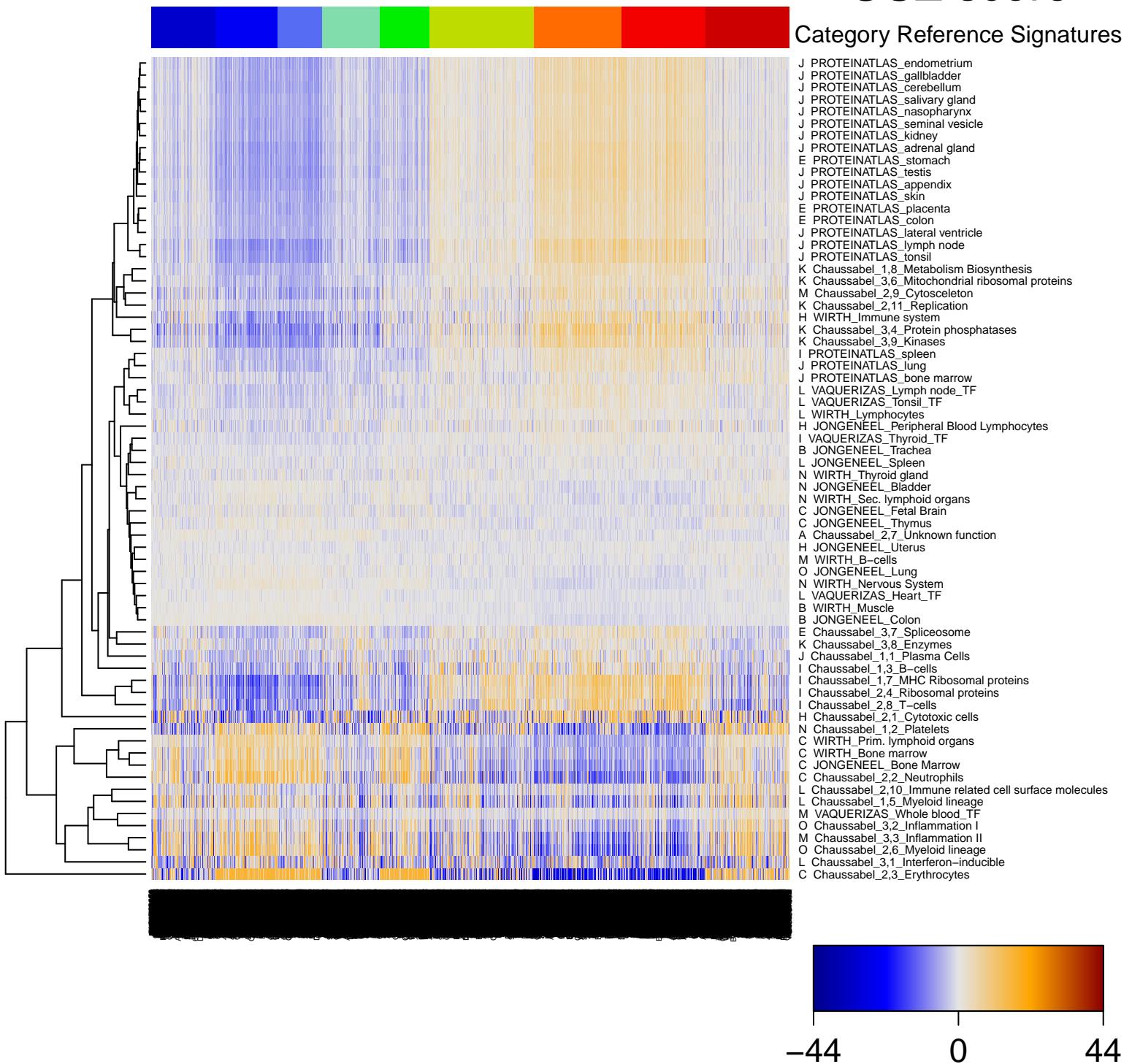


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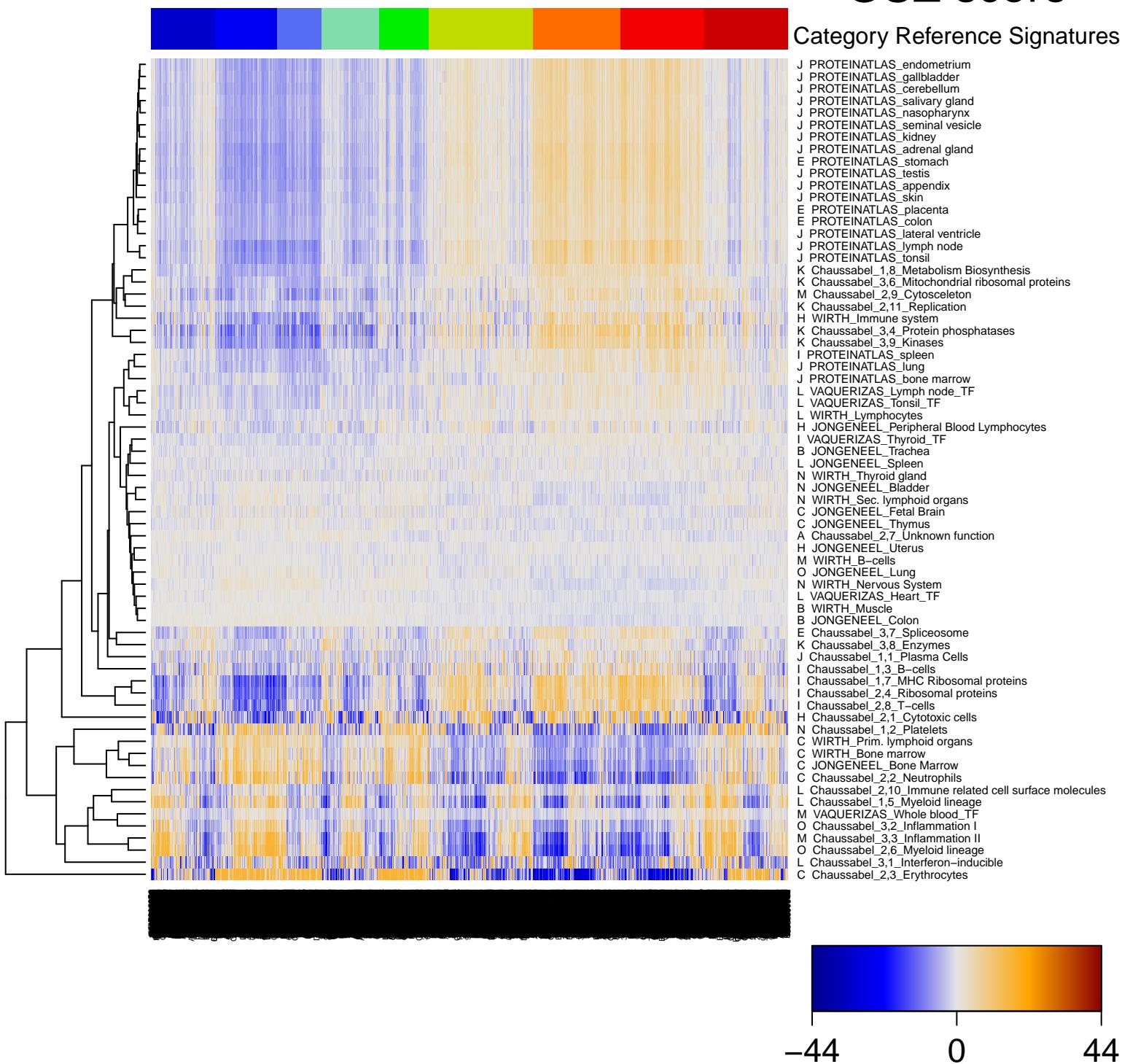
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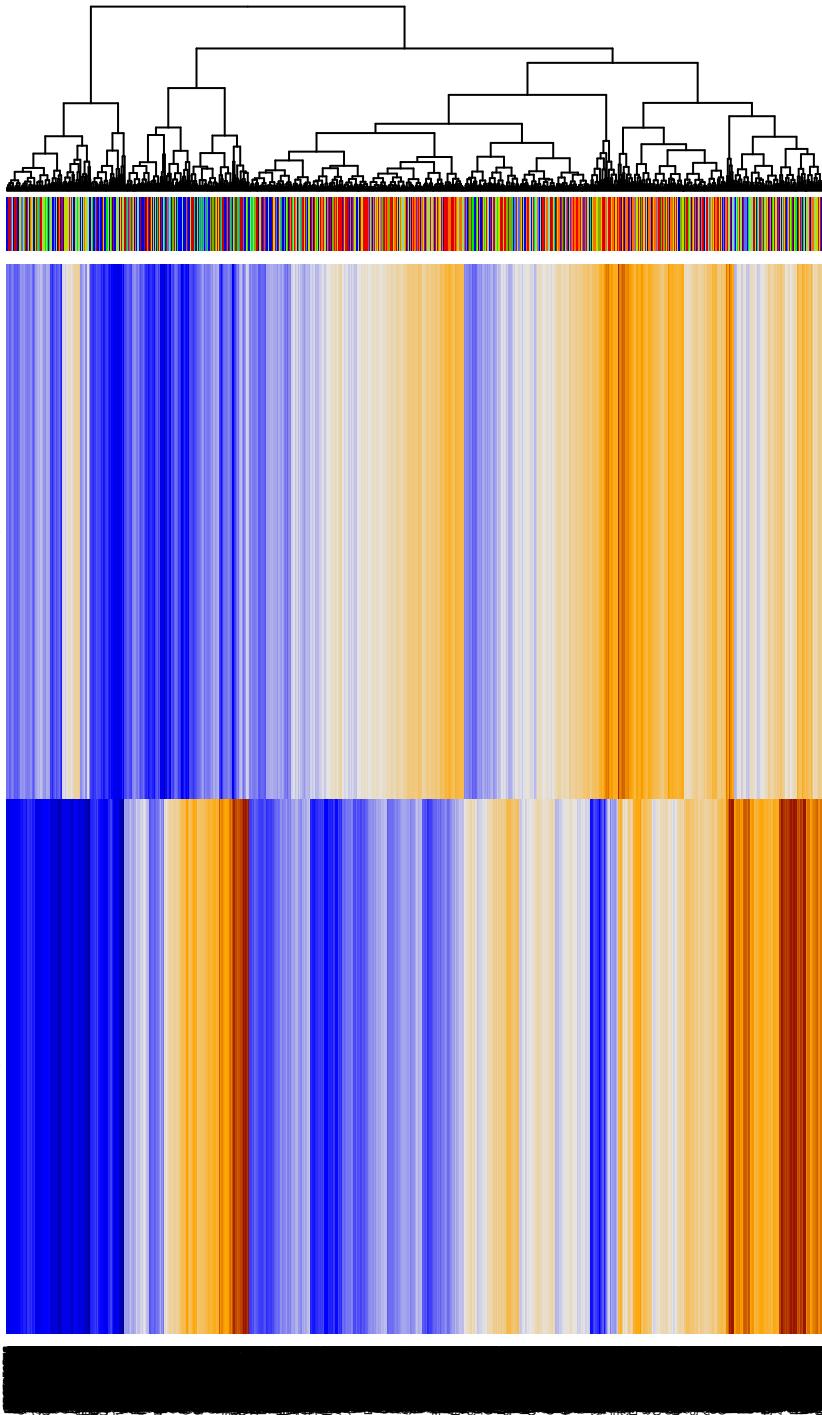


# GSZ score



# GSZ score

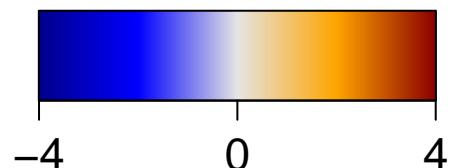




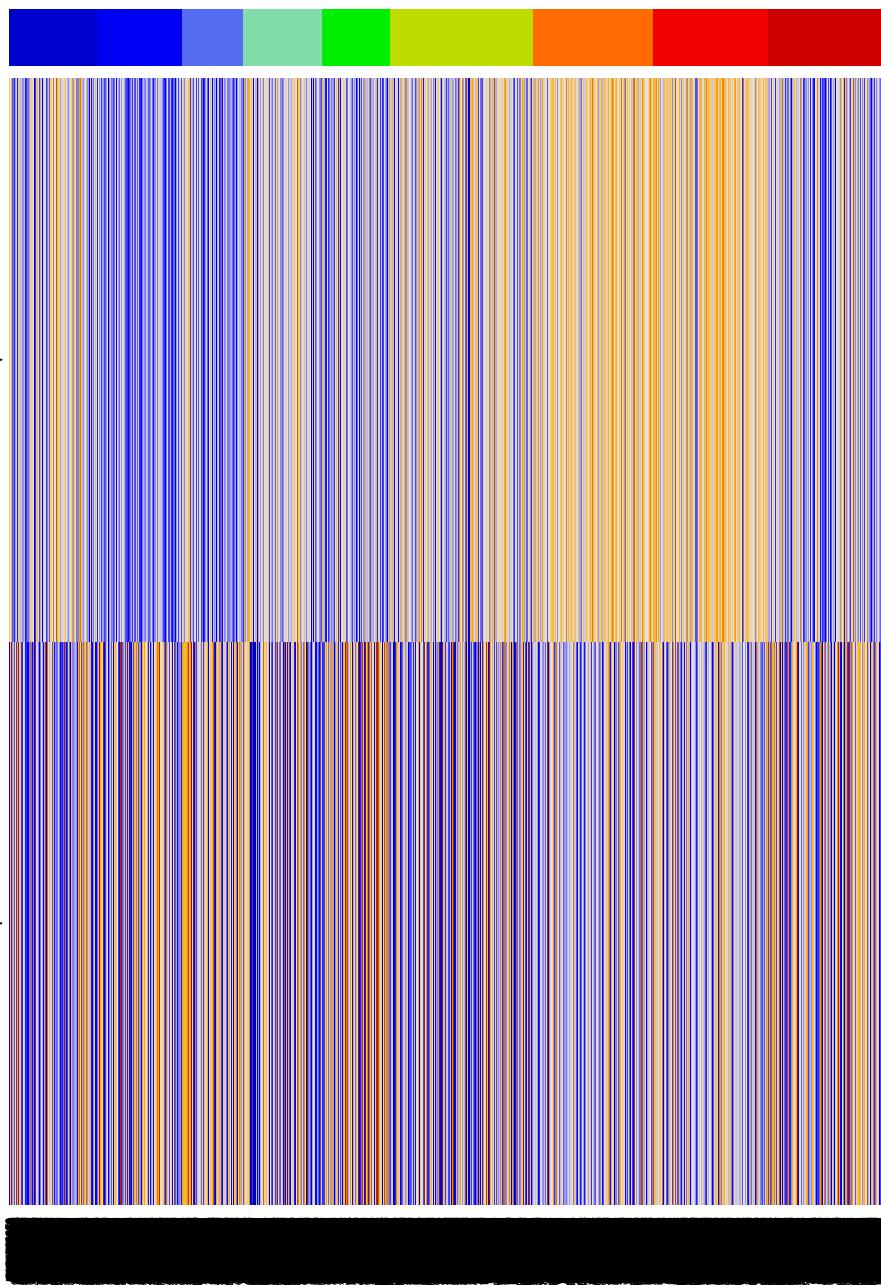
GSZ score  
Category Telomeres

A Alternative le

C Nabetani\_alt



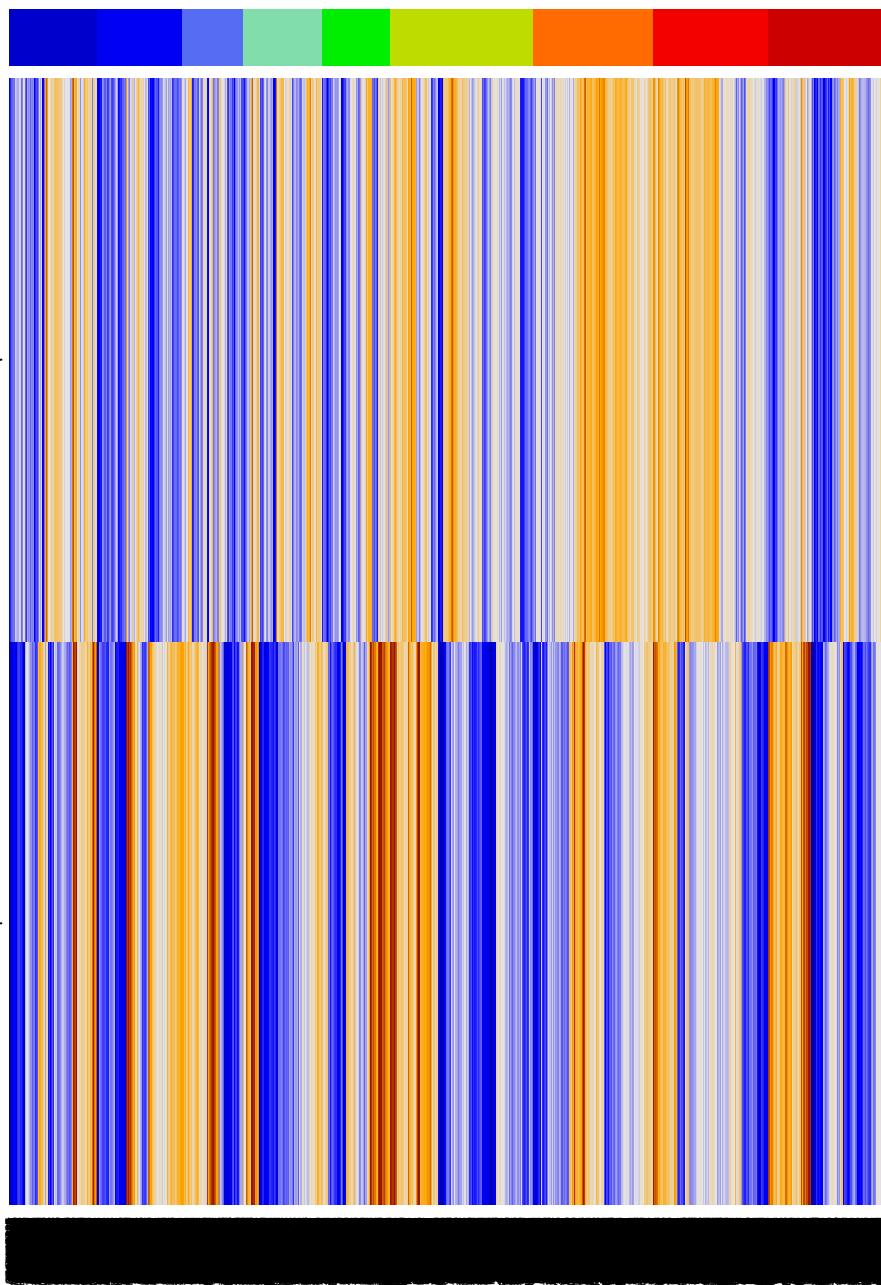
GSZ score  
Category Telomeres



A Alternative le

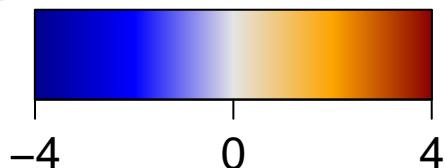
C Nabetani\_all

GSZ score  
Category Telomeres



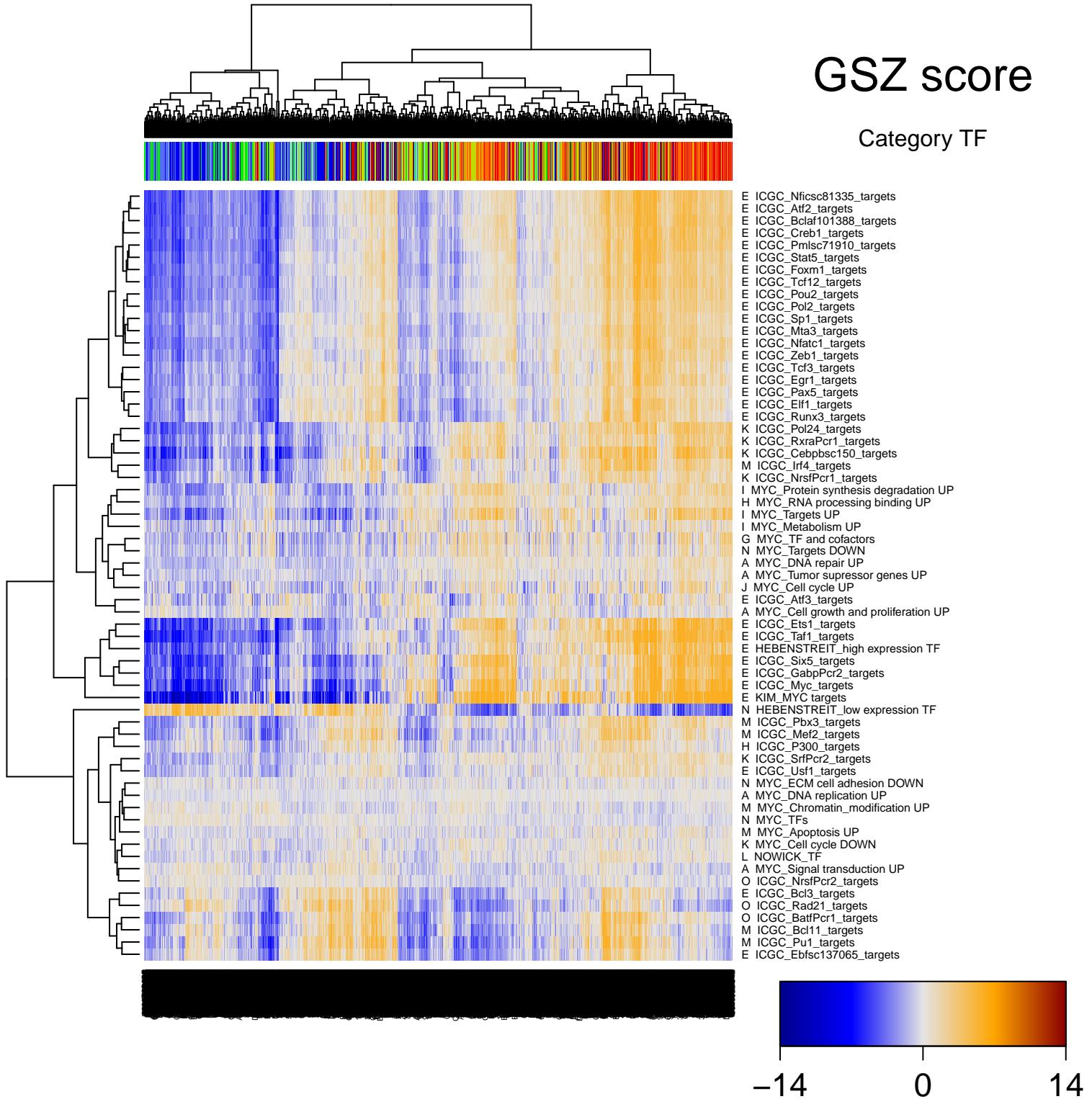
A Alternative le

C Nabetani\_al



# GSZ score

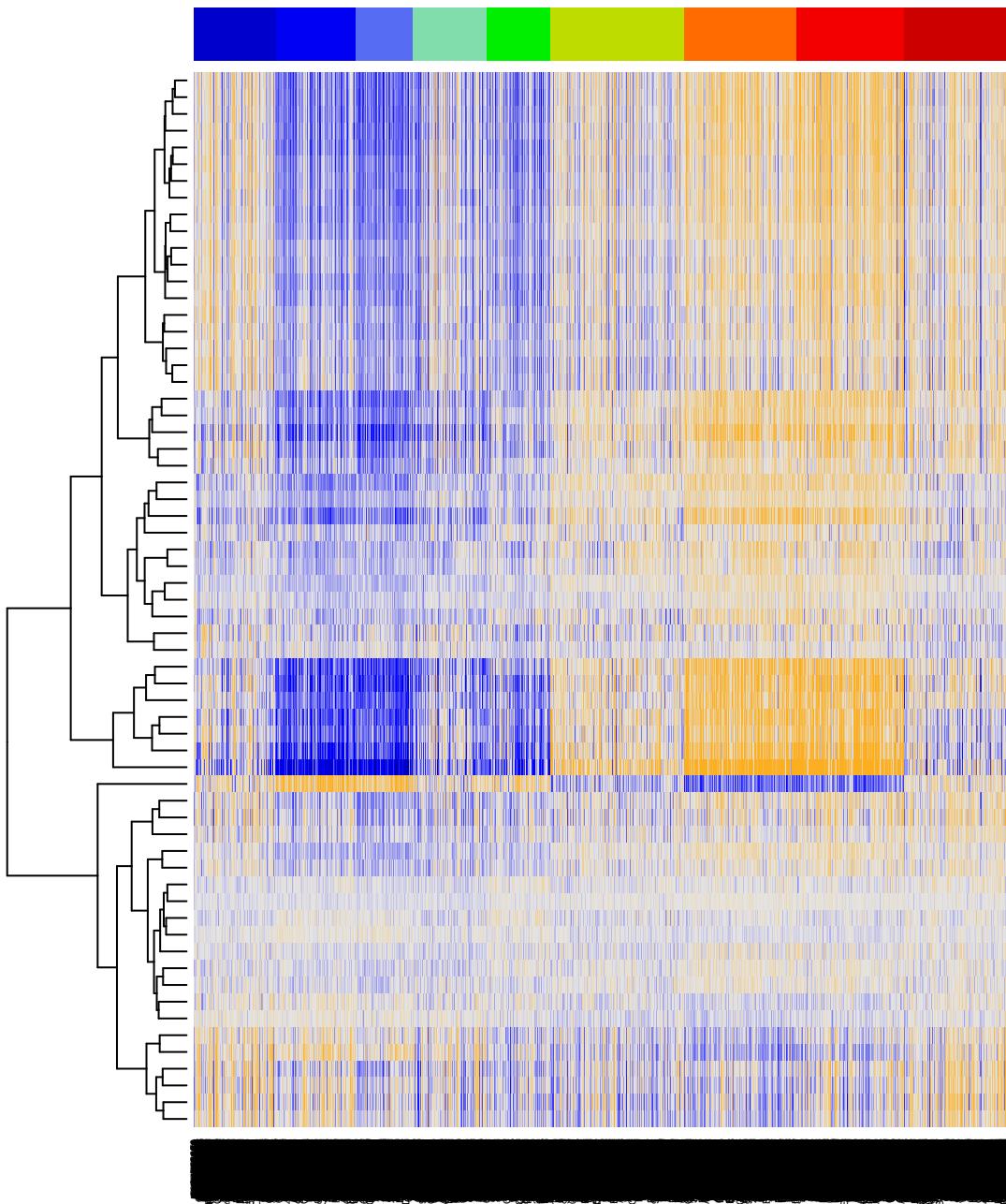
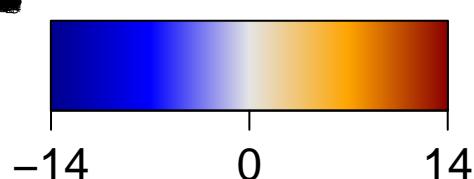
Category TF



# GSZ score

Category TF

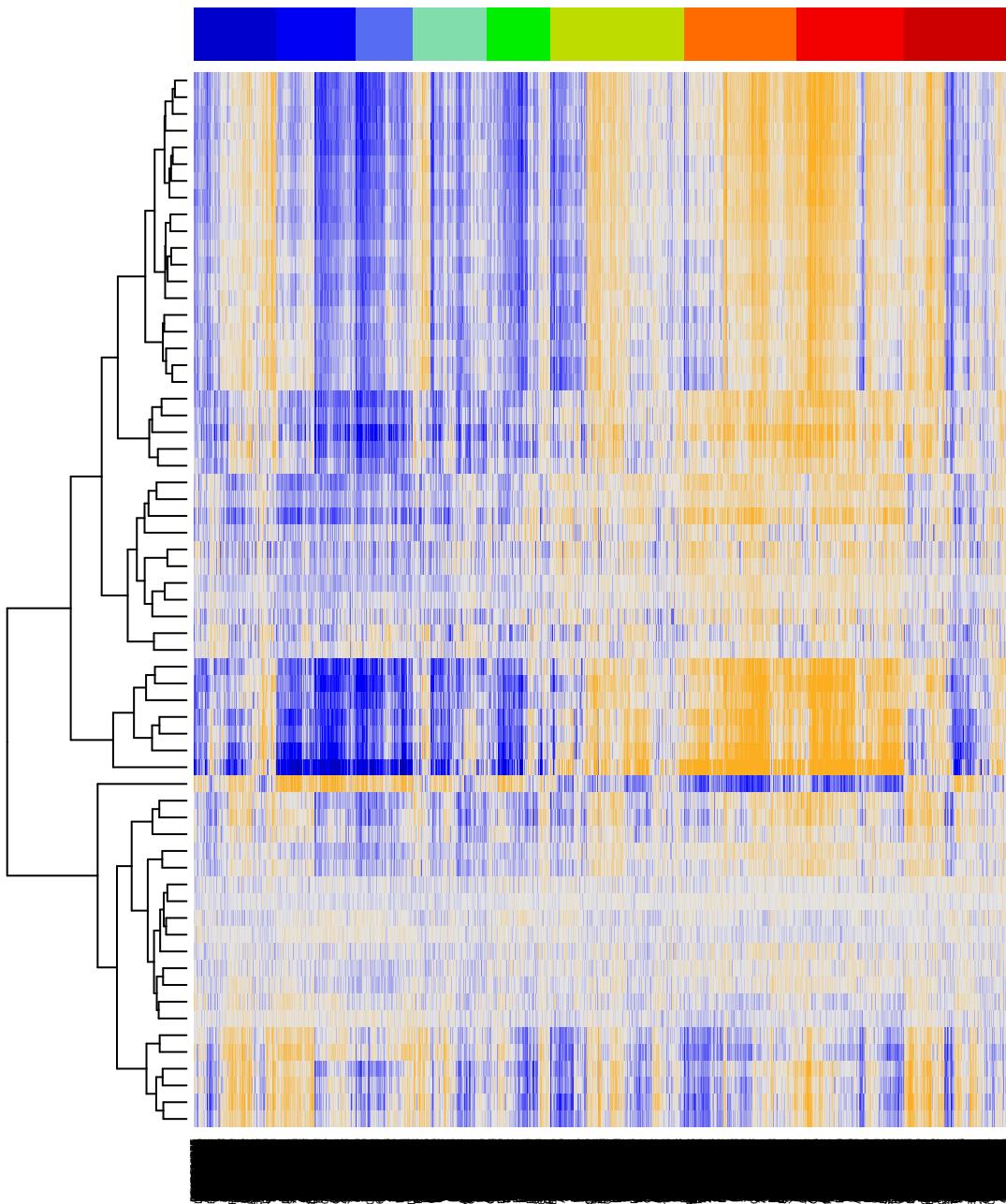
- E ICGC\_Nfiscsc81335\_targets
- E ICGC\_Atf2\_targets
- E ICGC\_Bclaf101388\_targets
- E ICGC\_Creb1\_targets
- E ICGC\_Pmlsc71910\_targets
- E ICGC\_Stat5\_targets
- E ICGC\_Foxm1\_targets
- E ICGC\_Tcf12\_targets
- E ICGC\_Pou2\_targets
- E ICGC\_Pol2\_targets
- E ICGC\_Sp1\_targets
- E ICGC\_Mta3\_targets
- E ICGC\_Nfatc1\_targets
- E ICGC\_Zeb1\_targets
- E ICGC\_Tcf3\_targets
- E ICGC\_Egr1\_targets
- F ICGC\_Pax5\_targets
- E ICGC\_Elf1\_targets
- E ICGC\_Runx3\_targets
- K ICGC\_Po24\_targets
- K ICGC\_RxraPcr1\_targets
- K ICGC\_Cebpbpsc150\_targets
- M ICGC\_Irf4\_targets
- K ICGC\_Nrsfpqr1\_targets
- I MYC\_Protein synthesis degradation UP
- H MYC\_RNA processing binding UP
- I MYC\_Targets UP
- I MYC\_Metabolism UP
- G MYC\_TF and cofactors
- N MYC\_Targets DOWN
- A MYC\_DNA repair UP
- A MYC\_Tumor suppressor genes UP
- J MYC\_Cell cycle UP
- E ICGC\_Atf2\_targets
- A MYC\_Cell growth and proliferation UP
- E ICGC\_Ets1\_targets
- E ICGC\_Taf1\_targets
- E HEBENSTREIT\_high expression TF
- E ICGC\_Six5\_targets
- E ICGC\_GabpPcr2\_targets
- E ICGC\_Myr\_targets
- E KIM\_MYC targets
- N HEBENSTREIT\_low expression TF
- M ICGC\_Pbx3\_targets
- M ICGC\_Mef2\_targets
- H ICGC\_P300\_targets
- K ICGC\_SrfPcr2\_targets
- E ICGC\_Usf1\_targets
- N MYC\_ECM cell adhesion DOWN
- A MYC\_DNA replication UP
- M MYC\_Chromatin\_modification UP
- N MYC\_TFs
- M MYC\_Apoptosis UP
- K MYC\_Cell cycle DOWN
- L NOWICK\_TF
- A MYC\_Signal transduction UP
- O ICGC\_Nrsfpqr2\_targets
- E ICGC\_Bcl3\_targets
- O ICGC\_Rad21\_targets
- O ICGC\_BatfPcr1\_targets
- M ICGC\_Bcl11\_targets
- M ICGC\_Pu1\_targets
- E ICGC\_Ebfsc137065\_targets



# GSZ score

Category TF

- E ICGC\_Nficsc81335\_targets
- E ICGC\_Atf2\_targets
- E ICGC\_Bclaf101388\_targets
- E ICGC\_Creb1\_targets
- E ICGC\_Pmlsc71910\_targets
- E ICGC\_Stat5\_targets
- E ICGC\_Foxm1\_targets
- E ICGC\_Tcf12\_targets
- E ICGC\_Pou2\_targets
- E ICGC\_Pol2\_targets
- E ICGC\_Sp1\_targets
- E ICGC\_Mta3\_targets
- E ICGC\_Nfatc1\_targets
- E ICGC\_Zeb1\_targets
- E ICGC\_Tcf3\_targets
- E ICGC\_Egr1\_targets
- E ICGC\_Pax5\_targets
- E ICGC\_Elf1\_targets
- E ICGC\_Runx3\_targets
- K ICGC\_Po24\_targets
- K ICGC\_RxraPcr1\_targets
- K ICGC\_Cebpbpsc150\_targets
- M ICGC\_Irf4\_targets
- K ICGC\_NrsfPcr1\_targets
- I MYC\_Protein synthesis degradation UP
- H MYC\_RNA processing binding UP
- I MYC\_Targets UP
- I MYC\_Metabolism UP
- G MYC\_TF and cofactors
- N MYC\_Targets DOWN
- A MYC\_DNA repair UP
- A MYC\_Tumor suppressor genes UP
- J MYC\_Cell cycle UP
- E ICGC\_Atf2\_targets
- A MYC\_Cell growth and proliferation UP
- E ICGC\_Ets1\_targets
- E ICGC\_Taf1\_targets
- E HEBENSTREIT\_high expression TF
- E ICGC\_Six5\_targets
- E ICGC\_GabpPcr2\_targets
- E ICGC\_Myr\_targets
- E KIM\_MYC targets
- N HEBENSTREIT\_low expression TF
- M ICGC\_Pbx3\_targets
- M ICGC\_Mef2\_targets
- H ICGC\_P300\_targets
- K ICGC\_SrfPcr2\_targets
- E ICGC\_Usf1\_targets
- N MYC\_ECM cell adhesion DOWN
- A MYC\_DNA replication UP
- M MYC\_Chromatin\_modification UP
- N MYC\_TFs
- M MYC\_Apoptosis UP
- K MYC\_Cell cycle DOWN
- L NOWICK\_TF
- A MYC\_Signal transduction UP
- O ICGC\_NrsfPcr2\_targets
- E ICGC\_Bcl3\_targets
- O ICGC\_Rad21\_targets
- O ICGC\_BatfPcr1\_targets
- M ICGC\_Bcl11\_targets
- M ICGC\_Pu1\_targets
- E ICGC\_Ebfsc137065\_targets



-14 0 14