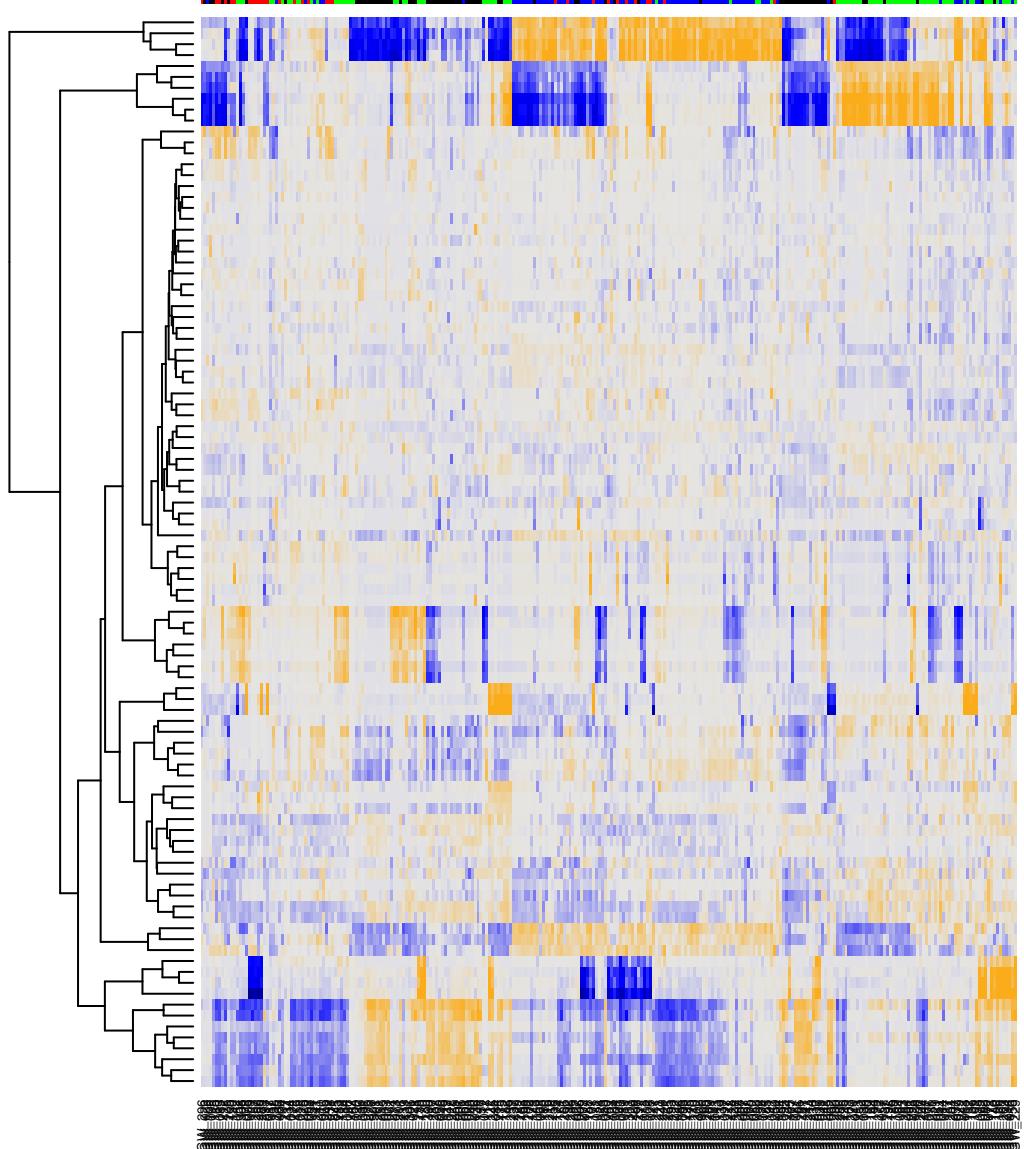
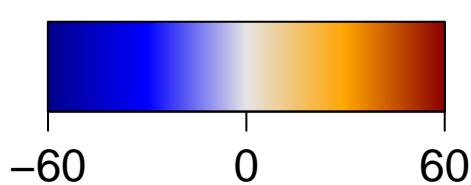


GSZ score

BP

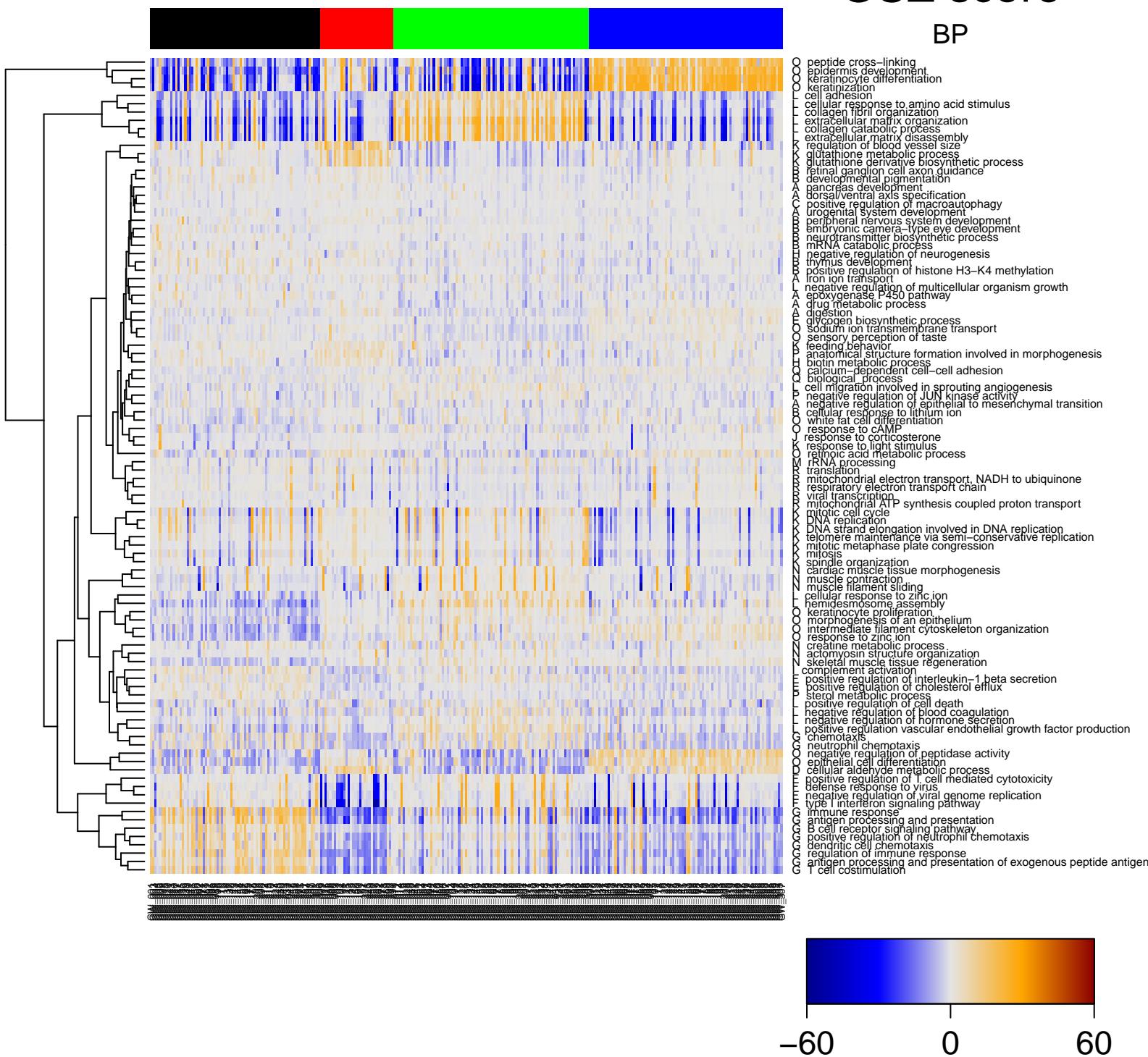


- O peptide cross-linking
- O keratinocyte development
- O keratinocyte differentiation
- O cell adhesion
- O cellular response to amino acid stimulus
- O extracellular matrix organization
- O collagen catabolic process
- O extracellular matrix disassembly
- O regulation of blood vessel size
- O glutathione derivative biosynthetic process
- O retinal ganglion cell axon guidance
- O developmental pigmentation
- O ganglia development
- O eye axis specification
- O positive regulation of macroautophagy
- O urogenital system development
- O peripheral nervous system development
- O retinal cone cell eye development
- O neurotransmitter biosynthetic process
- O mRNA catabolic process
- O negative regulation of neurogenesis
- O thymus development
- O positive regulation of histone H3-K4 methylation
- O iron ion transport
- O negative regulation of multicellular organism growth
- O epoxide hydrolase F450 pathway
- O drug metabolic process
- O dioxygen biosynthetic process
- O sodium ion transmembrane transport
- O sensory perception of taste
- O receptor interaction
- O anatomical structure formation involved in morphogenesis
- O biotin metabolic process
- O calcium-dependent cell-cell adhesion
- O biological process
- O collagen fiber involved in sprouting angiogenesis
- O negative regulation of JUN kinase activity
- O negative regulation of epithelial to mesenchymal transition
- O cellular response to lithium ion
- O positive regulation of cell migration
- O response to cAMP
- O response to corticosterone
- O response to light stimulus
- O rRNA processing
- O translation
- O mitochondrial electron transport, NADH to ubiquinone
- O respiratory electron transport chain
- O viral transcription
- O mitochondrial ATP synthase coupled proton transport
- O mitotic cell cycle
- O DNA replication
- O DNA strand elongation involved in DNA replication
- O sister chromatid exchange via semi-conservative replication
- O mitotic metaphase plate congression
- O mitosis
- O spindle organization
- O cardiac muscle tissue morphogenesis
- O muscle filament sliding
- O cellular filament sliding
- O hemidesmosome assembly
- O hemidesmosome disassembly
- O morphogenesis of an epithelium
- O intermediate filament cytoskeleton organization
- O response to zinc ion
- O creatine metabolic process
- O actin filament organization
- O skeletal muscle tissue regeneration
- O complement activation
- O positive regulation of interleukin-1 beta secretion
- O positive regulation of cholesterol efflux
- O steroid metabolic process
- O positive regulation of cell death
- O negative regulation of blood coagulation
- O negative regulation of hormone secretion
- O positive regulation of vascular endothelial growth factor production
- O chemotaxis
- O neutrophil chemotaxis
- O negative regulation of peptidase activity
- O epithelial cell differentiation
- O cellular response to signal process
- O positive regulation of T cell mediated cytotoxicity
- O defense response to virus
- O negative regulation of viral genome replication
- O tyrosine receptor signaling pathway
- O immune response
- O antigen processing and presentation
- O B cell receptor signaling pathway
- O positive regulation of neutrophil chemotaxis
- O antigen processing and presentation
- O regulation of immune response
- O T cell costimulation



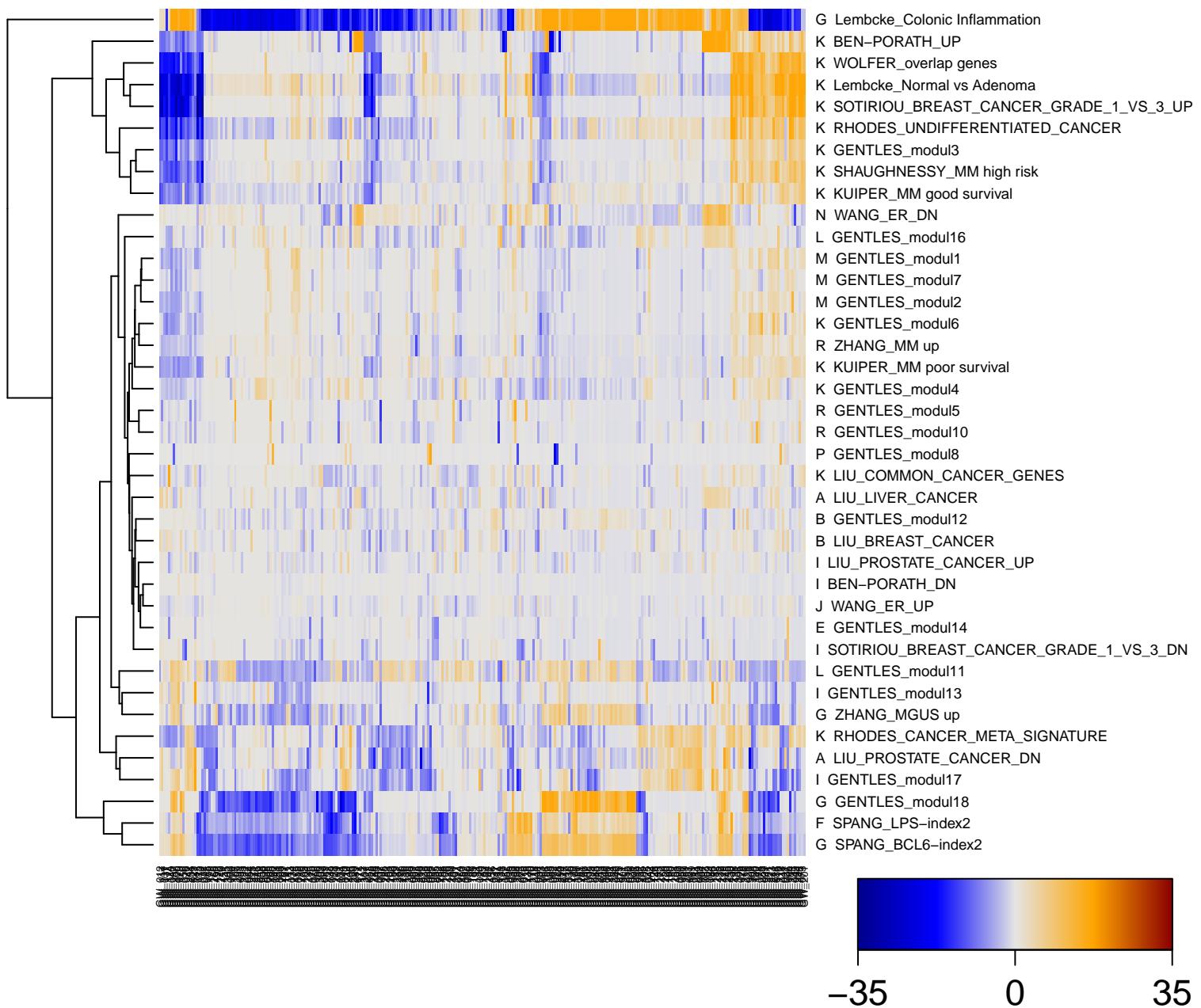
GSZ score

BP



GSZ score

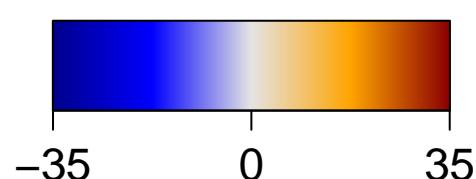
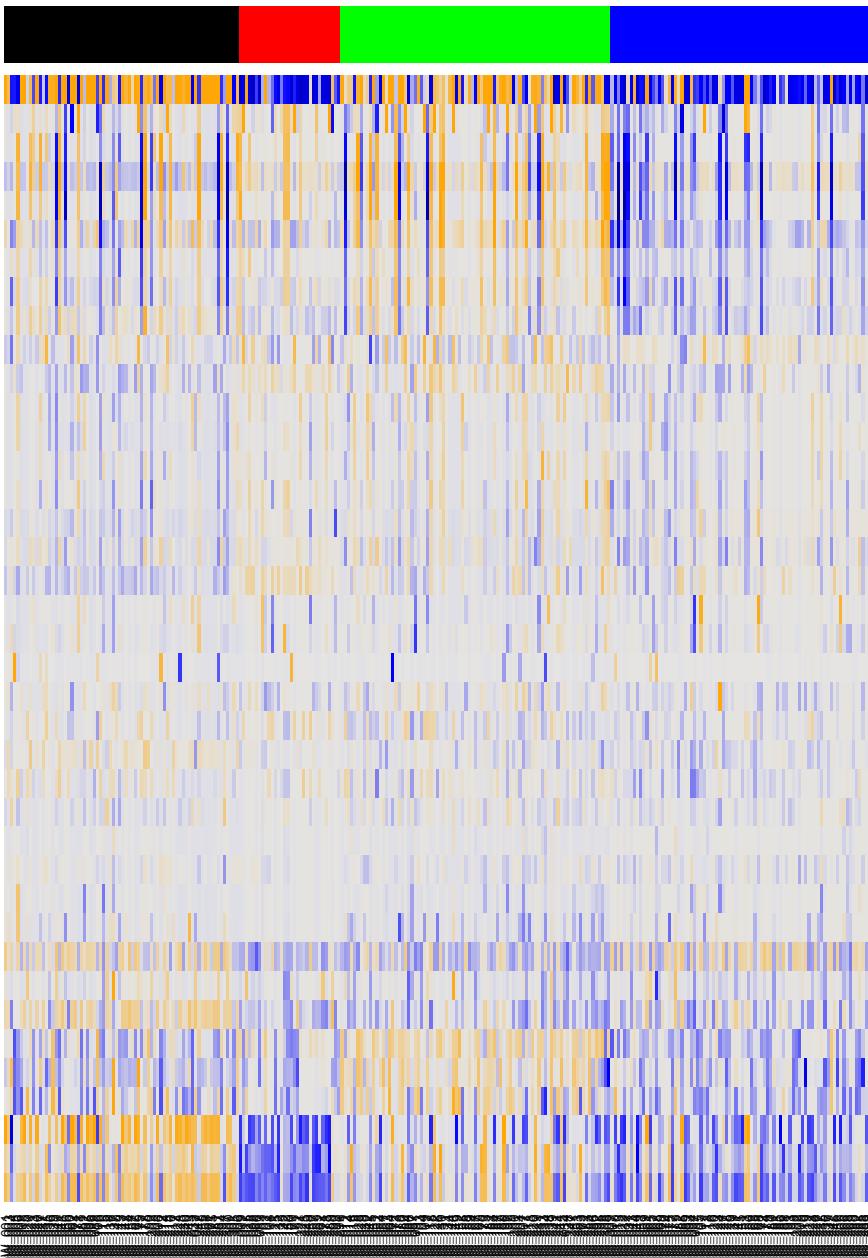
Cancer



GSZ score

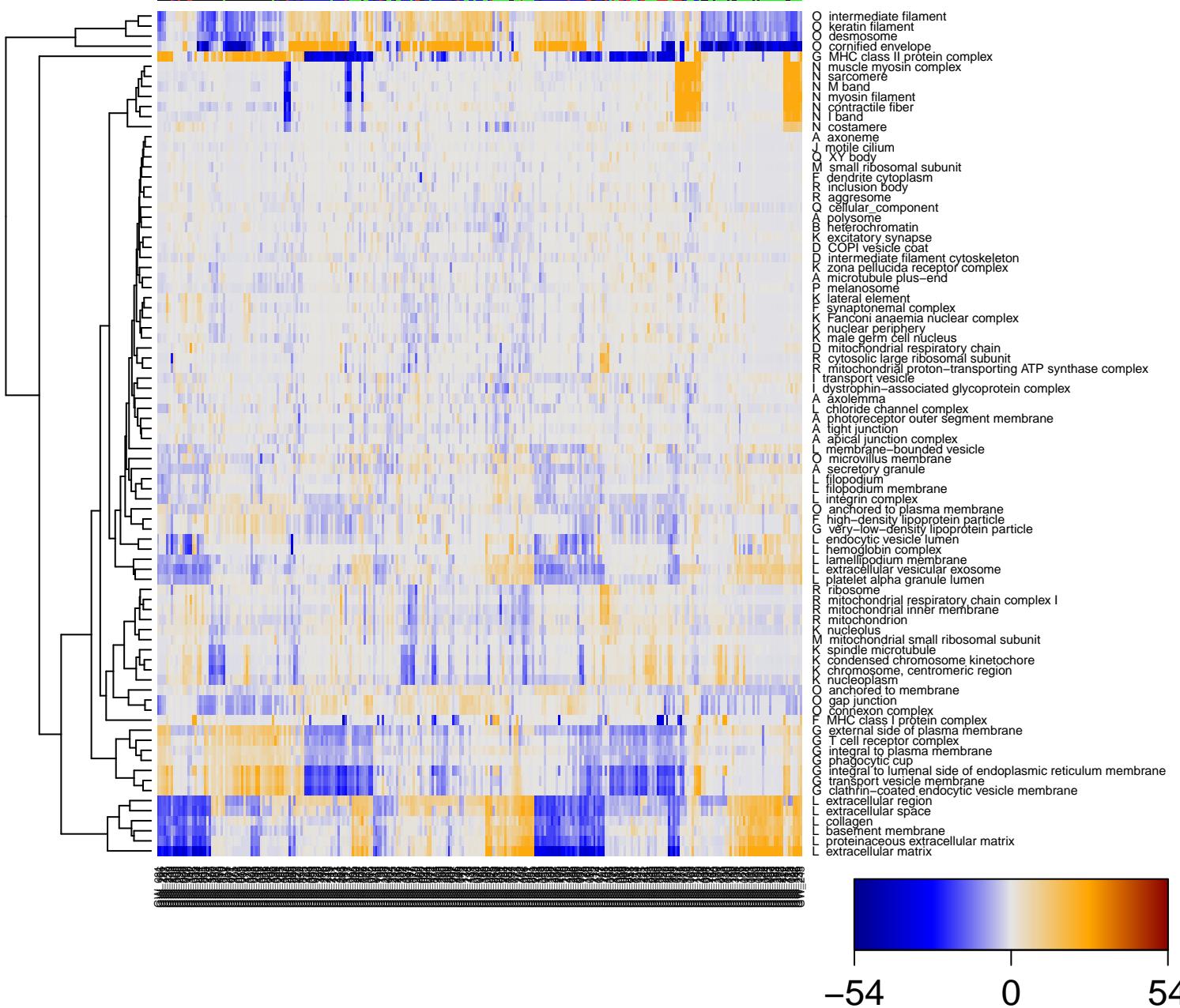
Cancer

- G Lembcke_Colonic Inflammation
K BEN-PORATH_UP
K WOLFER_overlap genes
K Lembcke_Normal vs Adenoma
K SOTIRIOU_BREAST_CANCER_GRADE_1_VS_3_UP
K RHODES_UNDIFFERENTIATED_CANCER
K GENTLES_modul3
K SHAUGHNESSY_MM high risk
K KUIPER_MM good survival
N WANG_ER_DN
L GENTLES_modul16
M GENTLES_modul1
M GENTLES_modul7
M GENTLES_modul2
K GENTLES_modul6
R ZHANG_MM up
K KUIPER_MM poor survival
K GENTLES_modul4
R GENTLES_modul5
R GENTLES_modul10
P GENTLES_modul8
K LIU_COMMON_CANCER_GENES
A LIU_LIVER_CANCER
B GENTLES_modul12
B LIU_BREAST_CANCER
I LIU_PROSTATE_CANCER_UP
I BEN-PORATH_DN
J WANG_ER_UP
E GENTLES_modul14
I SOTIRIOU_BREAST_CANCER_GRADE_1_VS_3_DN
L GENTLES_modul11
I GENTLES_modul13
G ZHANG_MGUS up
K RHODES_CANCER_META_SIGNATURE
A LIU_PROSTATE_CANCER_DN
I GENTLES_modul17
G GENTLES_modul18
F SPANG_LPS-index2
G SPANG_BCL6-index2



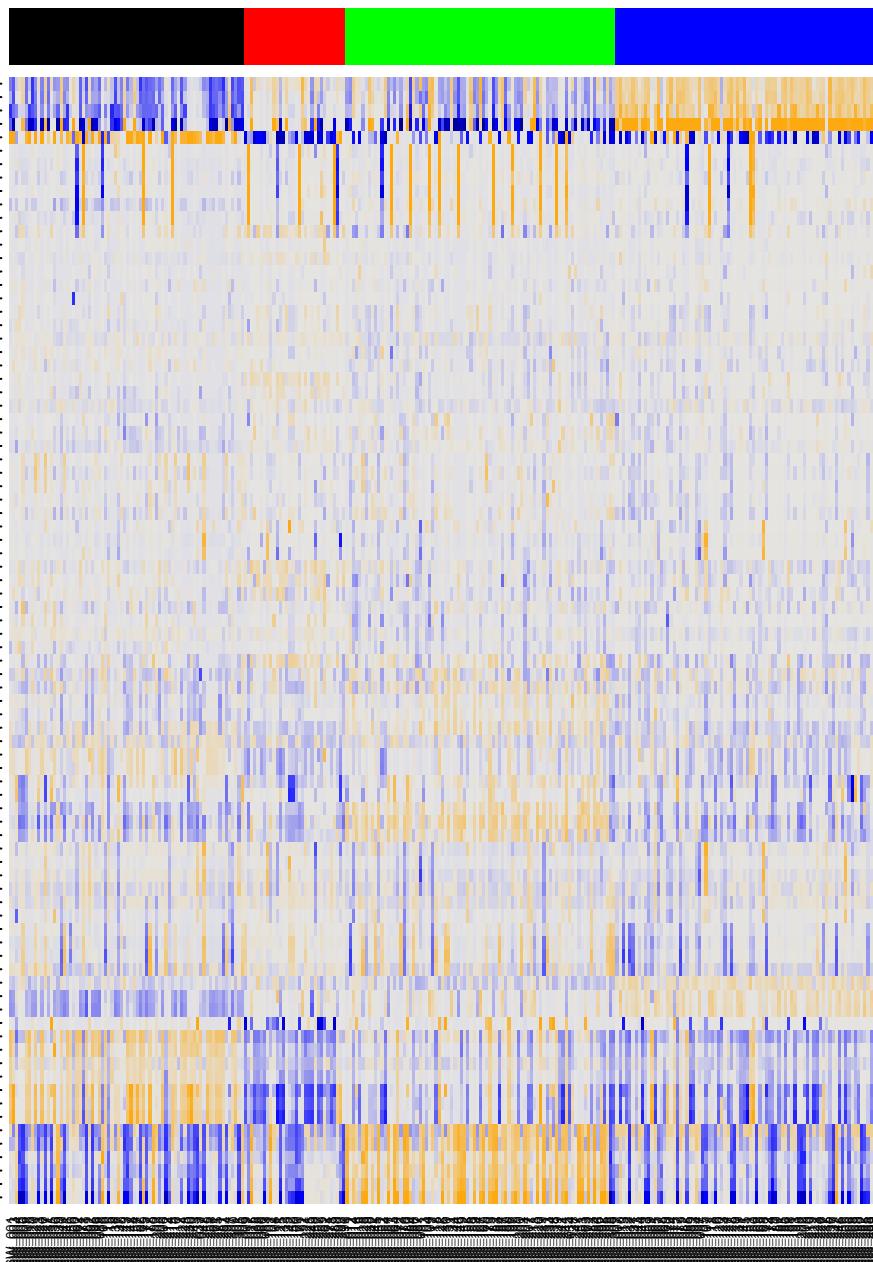
GSZ score

CC



GSZ score

CC

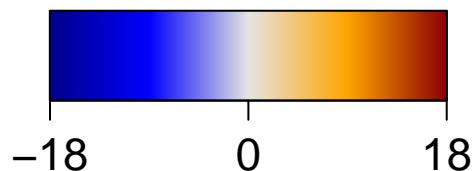
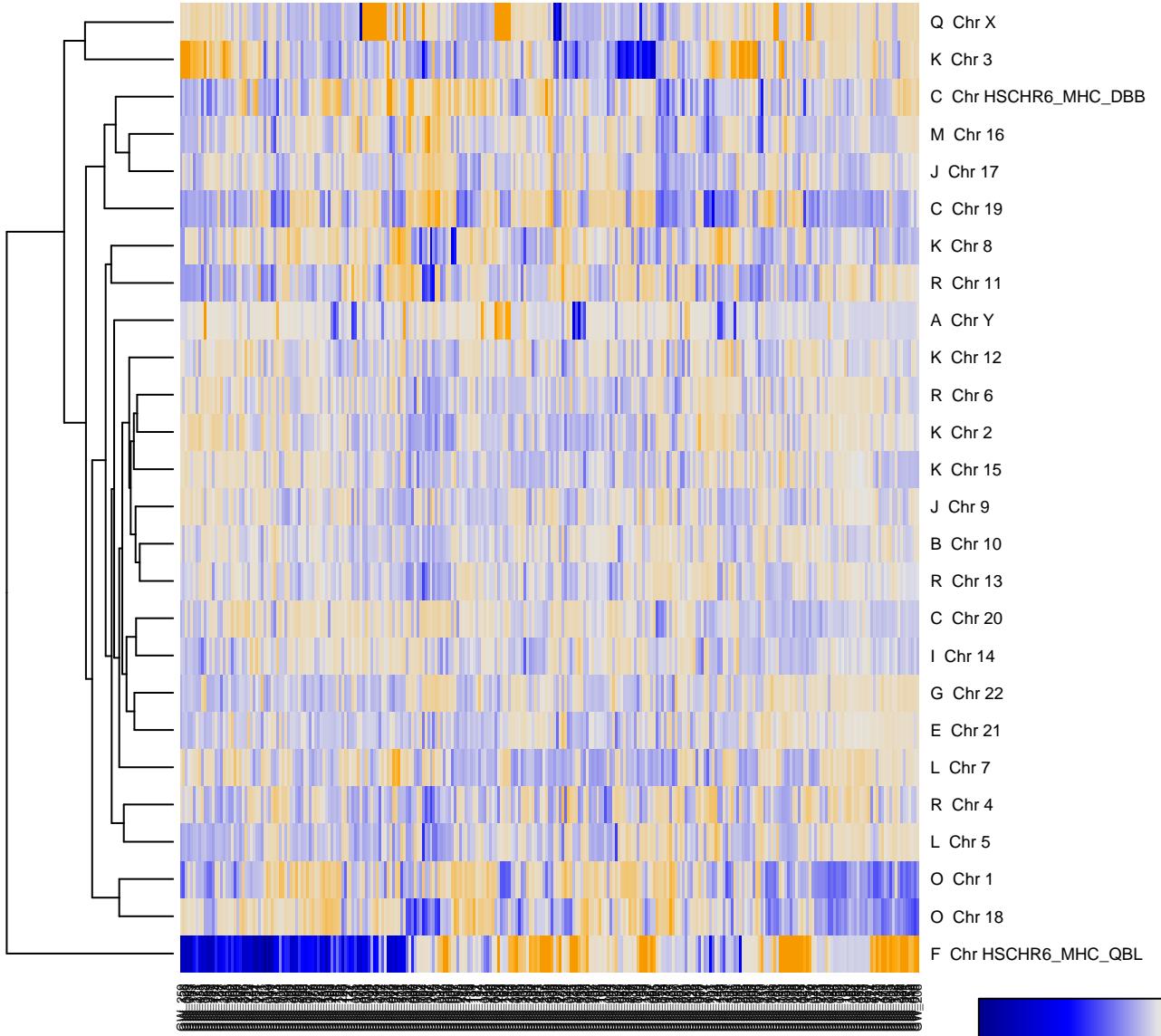


- O intermediate filament
 O keratin filament
 O desmosome
 O cornified envelope
 O MHC class II protein complex
 O muscle myosin complex
 N sarcomere
 N M band
 N myosin filament
 N contractile fiber
 N I band
 N costamere
 A axoneme
 J motile cilium
 Q XY body
 M small ribosomal subunit
 F dendrite cytoplasm
 R inclusion body
 R aggresome
 Q cellular component
 A polysome
 B heterochromatin
 K excitatory synapse
 COPI vesicle coat
 D intermediate filament cytoskeleton
 D zonula adherens receptor complex
 K microtubule plus-end
 P melanosome
 K lateral element
 F synaptosomal complex
 K Fanconi anaemia nuclear complex
 K nuclear periphery
 K male germ cell nucleus
 D mitochondrial respiratory chain
 R cytosolic large ribosomal subunit
 R mitochondrial proton-transporting ATP synthase complex
 I transport vesicle
 I dystrophin-associated glycoprotein complex
 A axolemma
 L chloride channel complex
 A photoreceptor outer segment membrane
 A tight junction
 A apical junction complex
 L membrane-bounded vesicle
 O microvillus membrane
 A secretory granule
 L filopodium
 L filopodium membrane
 integrin complex
 anchored to plasma membrane
 P high-density lipoprotein particle
 G very-low-density lipoprotein particle
 endocytic vesicle lumen
 hemoglobin complex
 lamellipodium membrane
 extracellular vesicular exosome
 platelet alpha granule lumen
 ribosome
 R mitochondrial respiratory chain complex I
 R mitochondrial inner membrane
 R mitochondrion
 K nucleoplus
 M mitochondrial small ribosomal subunit
 K spindle microtubule
 K condensed chromosome kinetochore
 K chromosome, centromeric region
 K nucleoplasm
 O anchored to membrane
 gap junction
 O connexin complex
 F MHC class I protein complex
 G external side of plasma membrane
 T cell receptor complex
 integral to plasma membrane
 phagocytic cup
 integral to luminal side of endoplasmic reticulum membrane
 transport vesicle membrane
 clathrin-coated endocytic vesicle membrane
 extracellular region
 extracellular space
 collagen
 basement membrane
 proteinaceous extracellular matrix
 extracellular matrix

-54 0 54

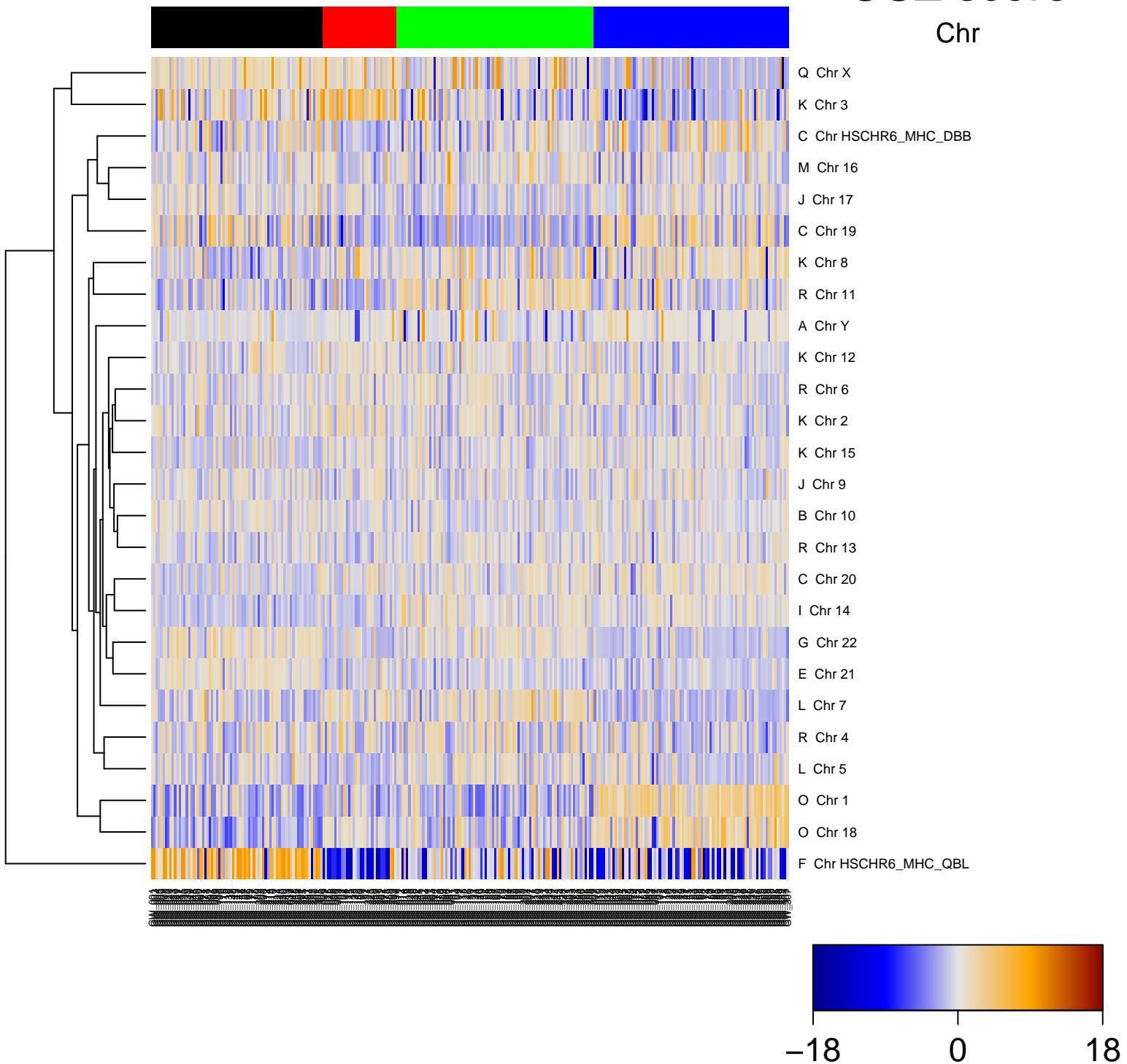
GSZ score

Chr



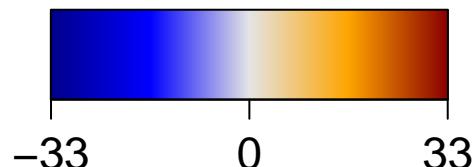
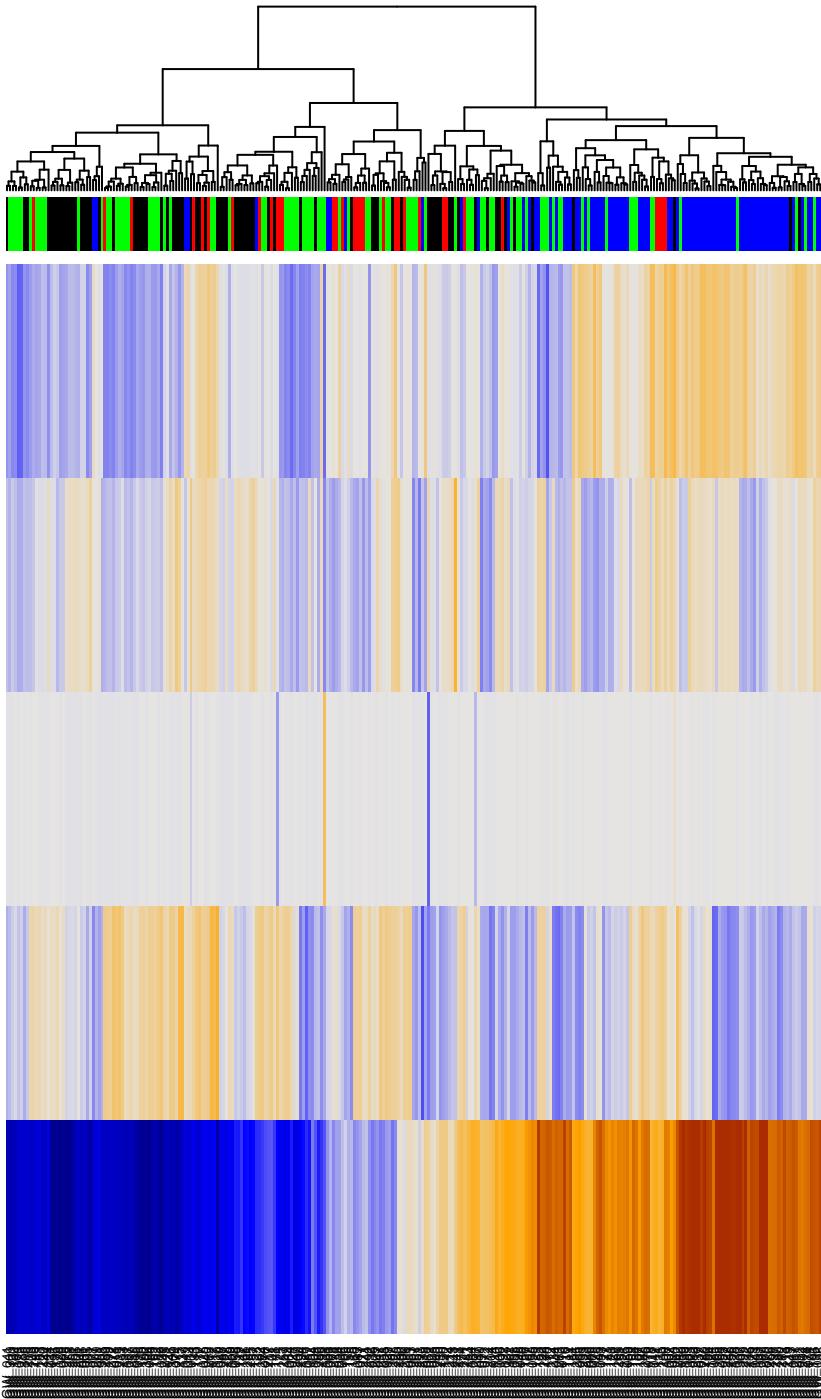
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Chr



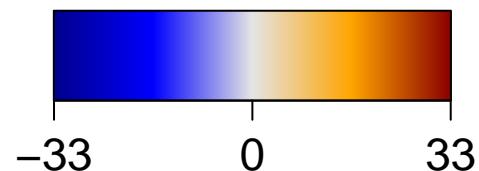
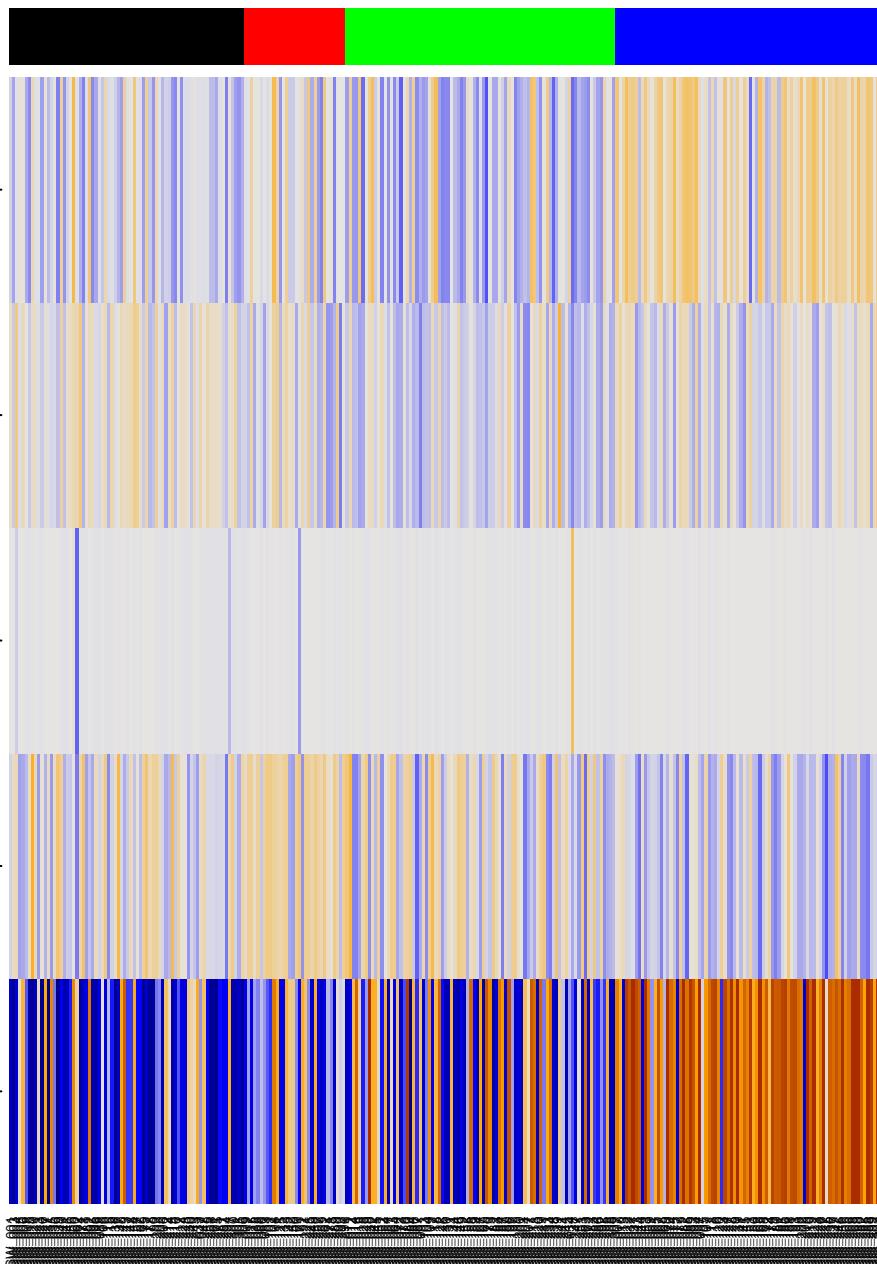
GSZ score

Disease



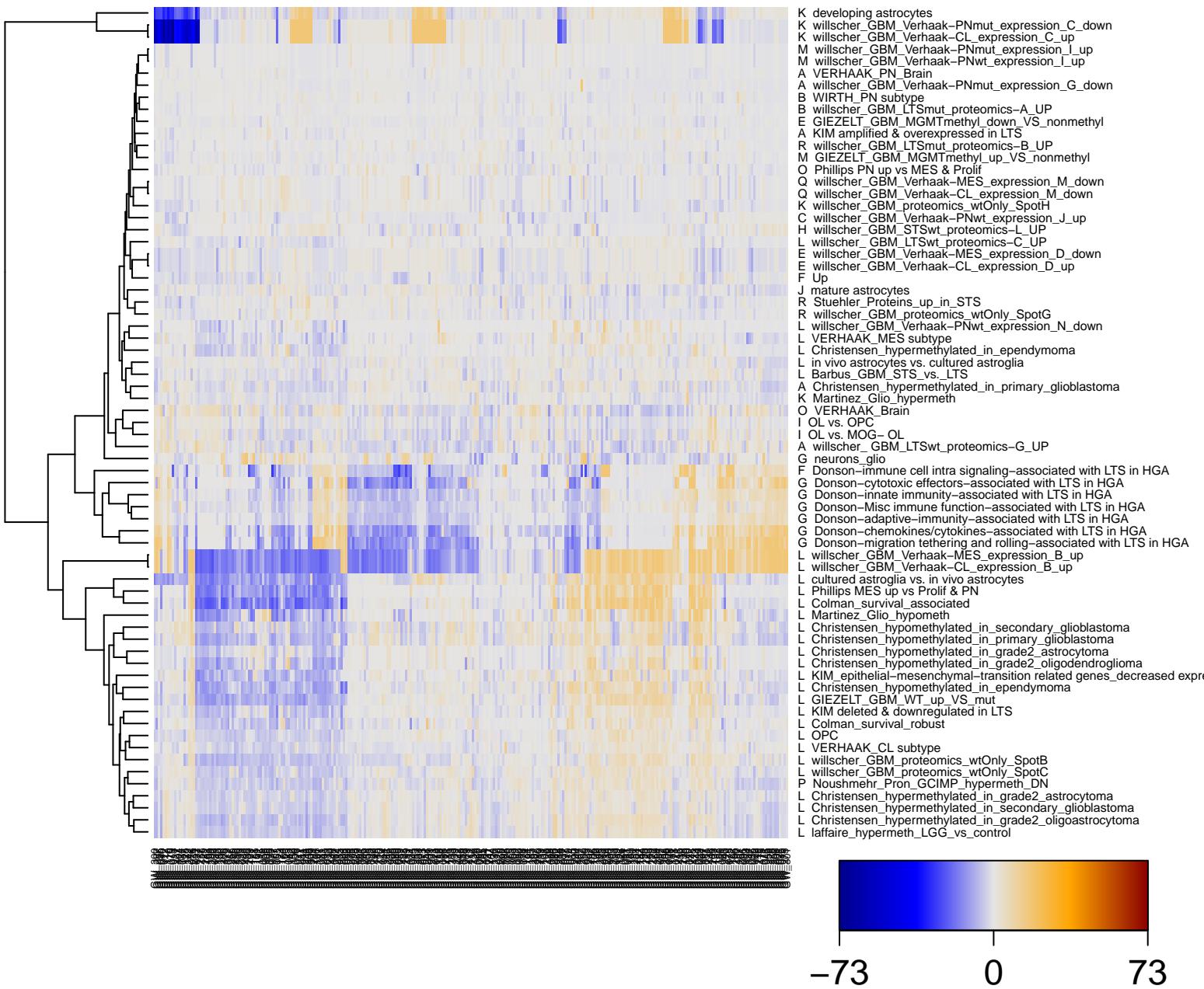
GSZ score

Disease



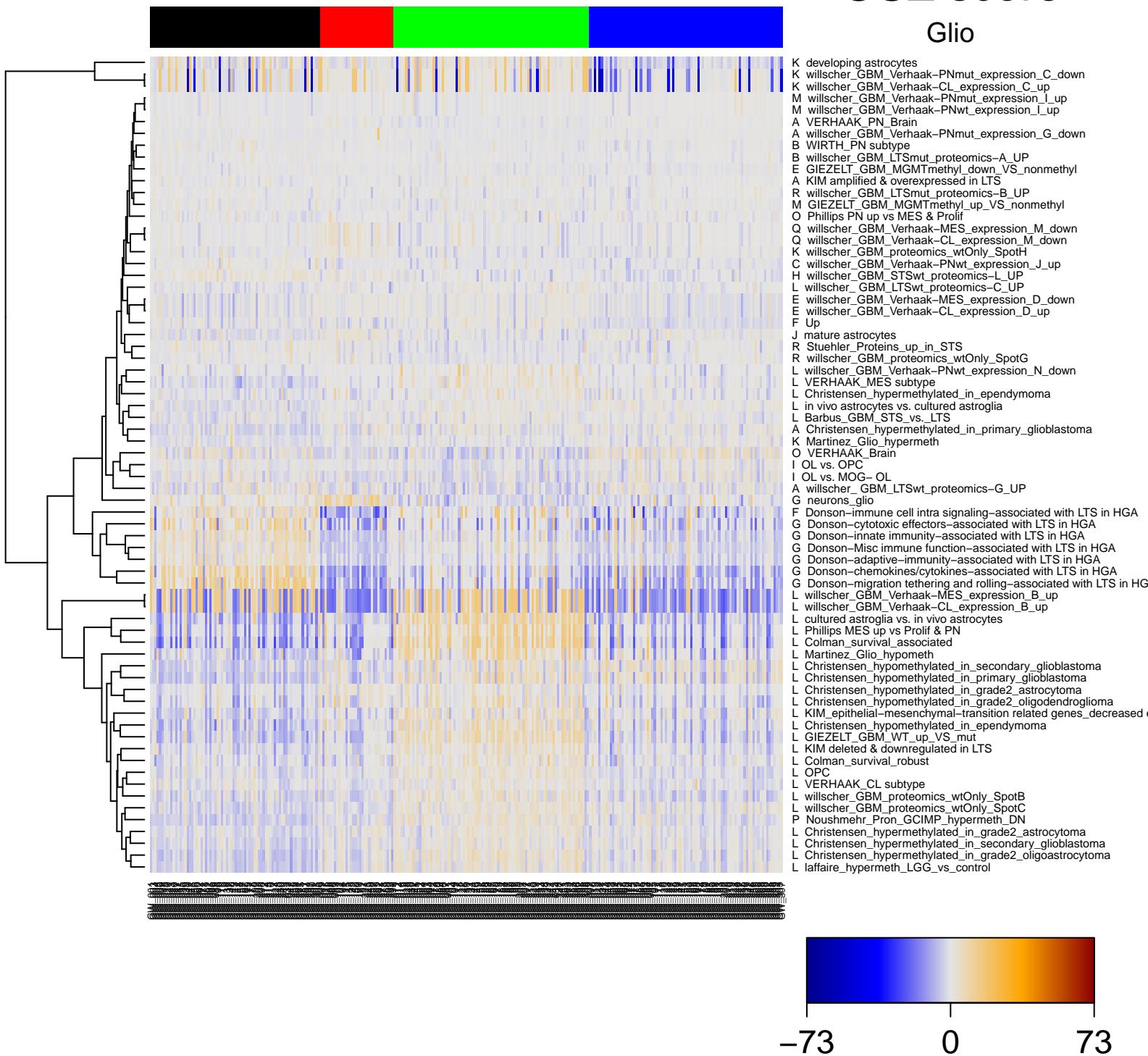
GSZ score

Glio



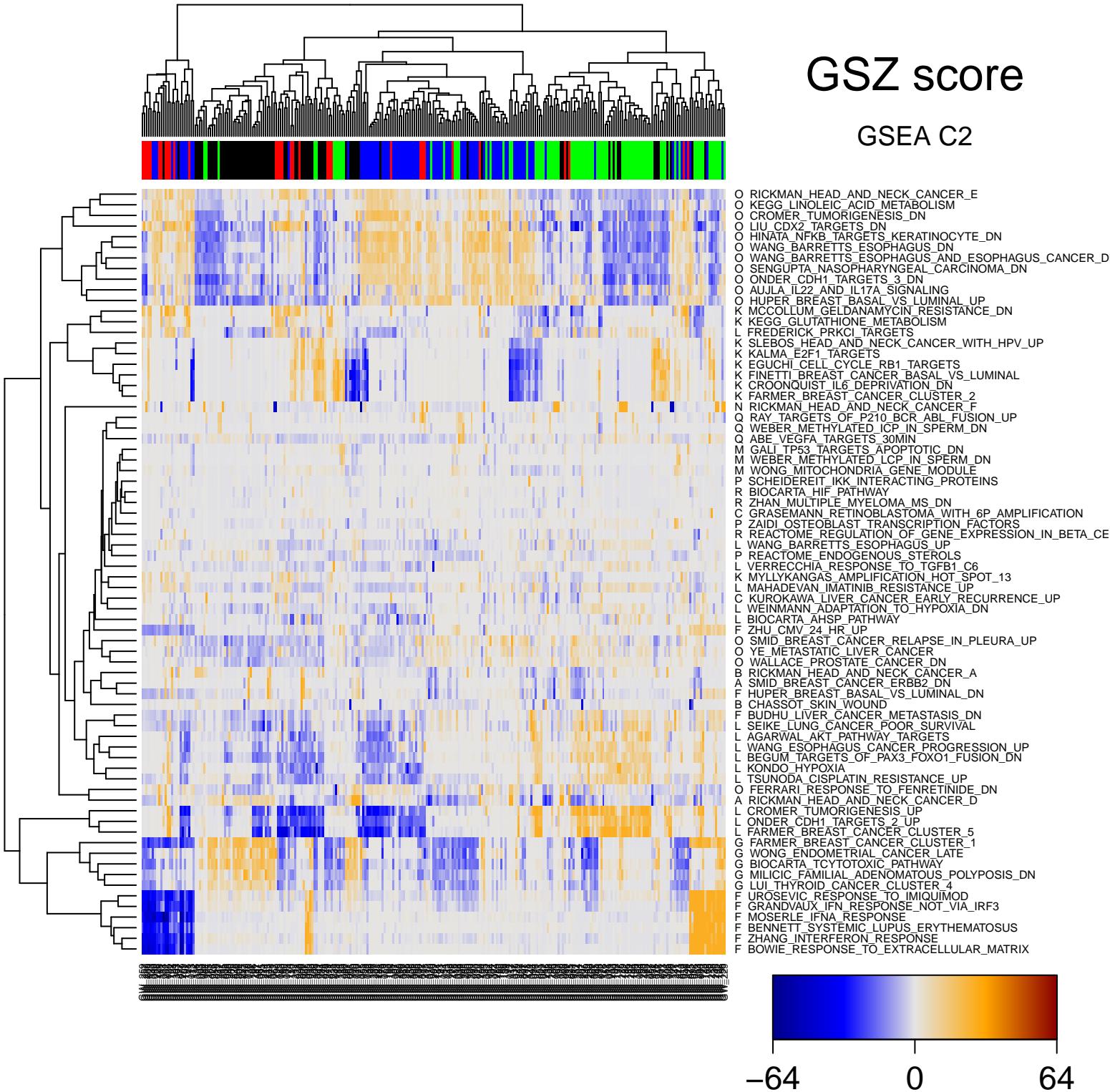
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Glio



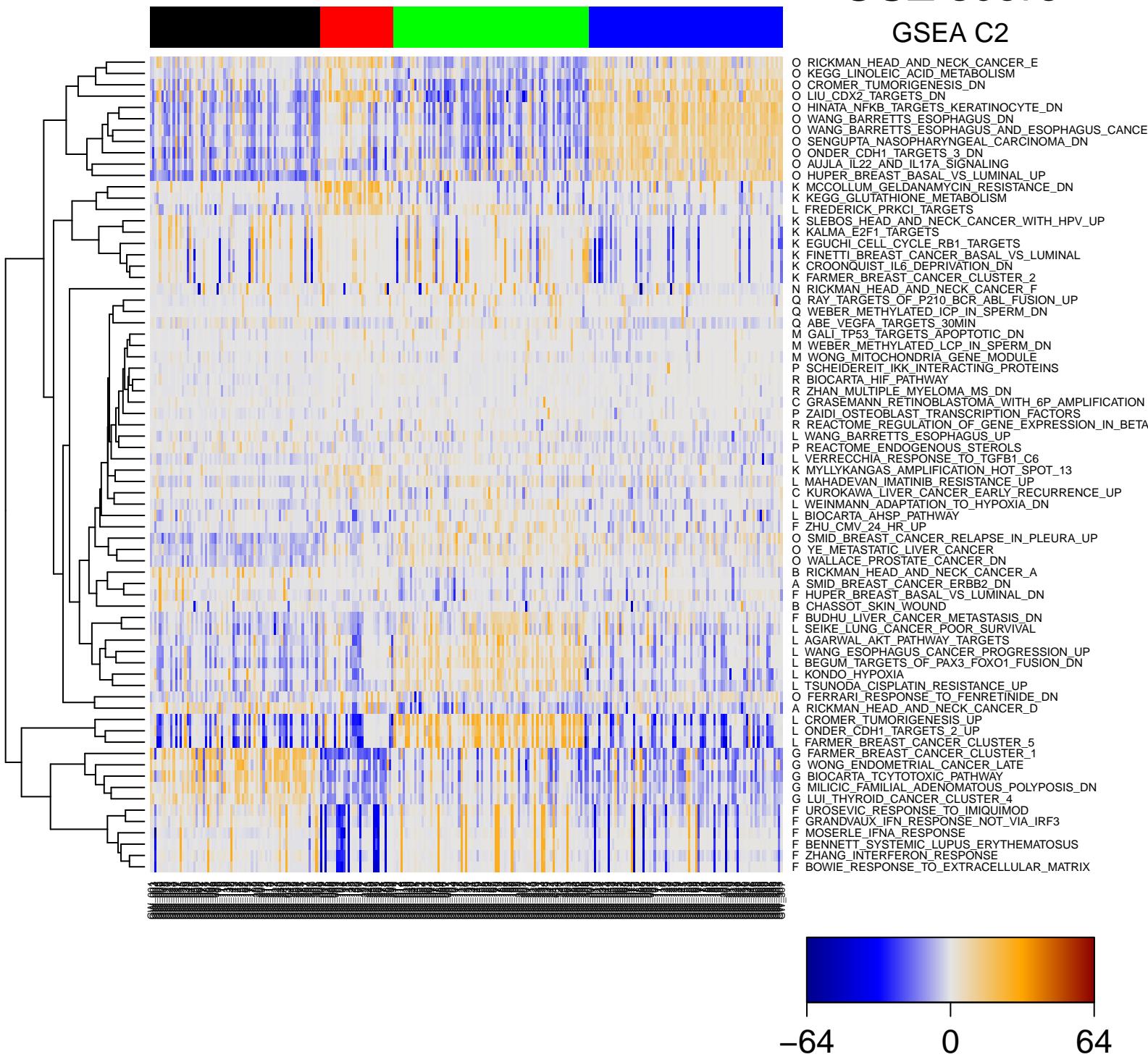
GSZ score

GSEA C2



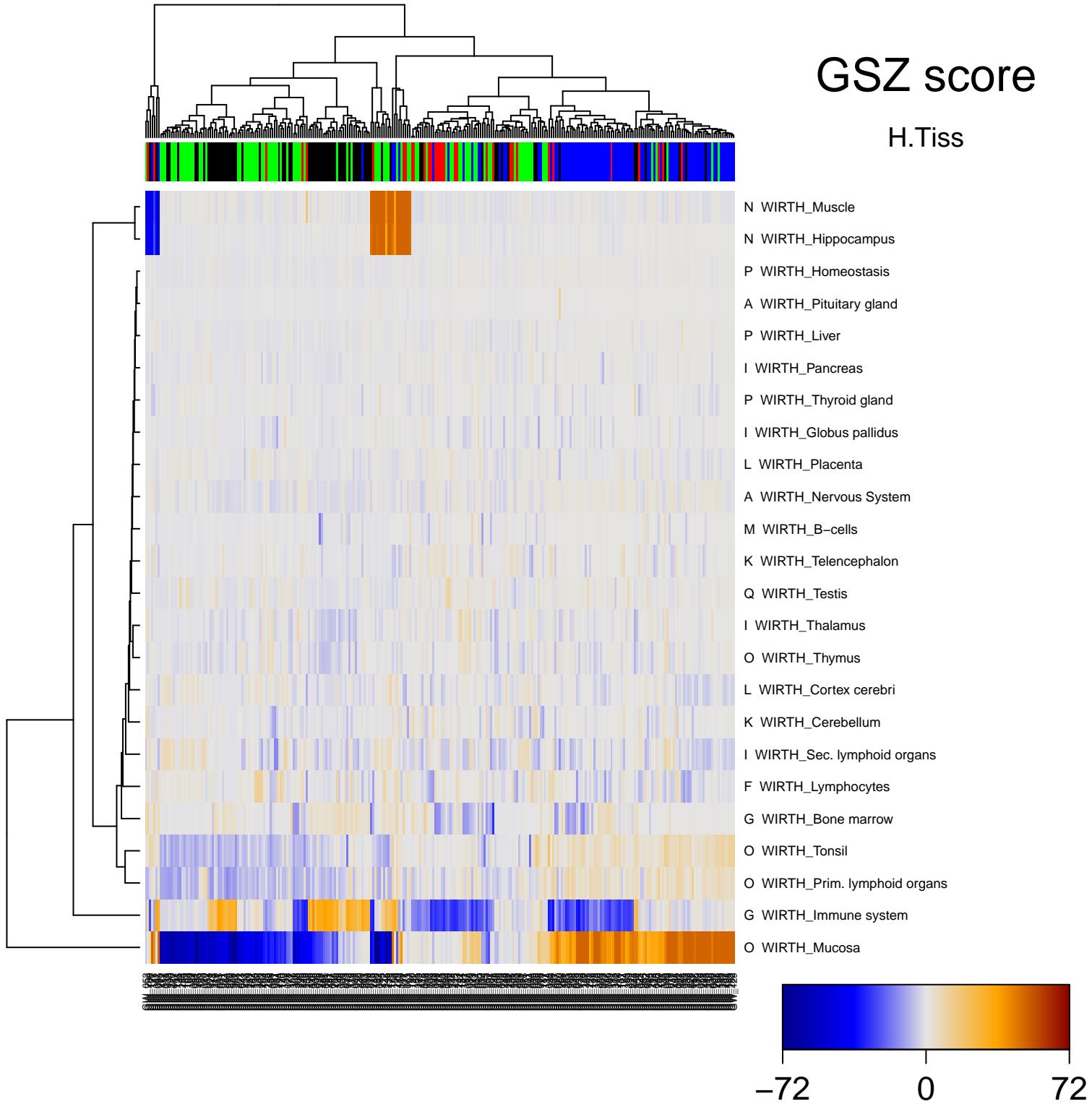
GSZ score

GSEA C2



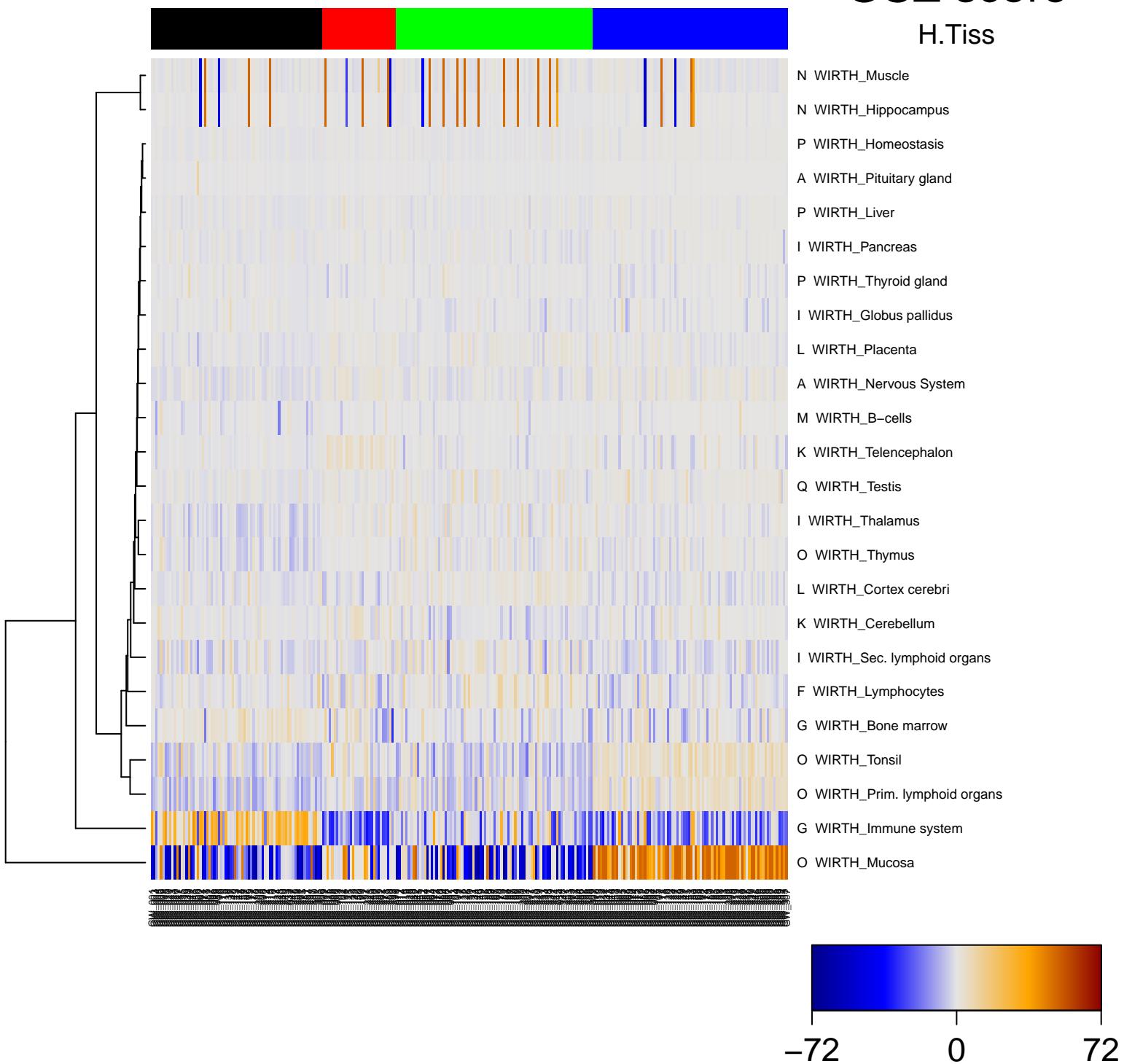
GSZ score

H.Tiss



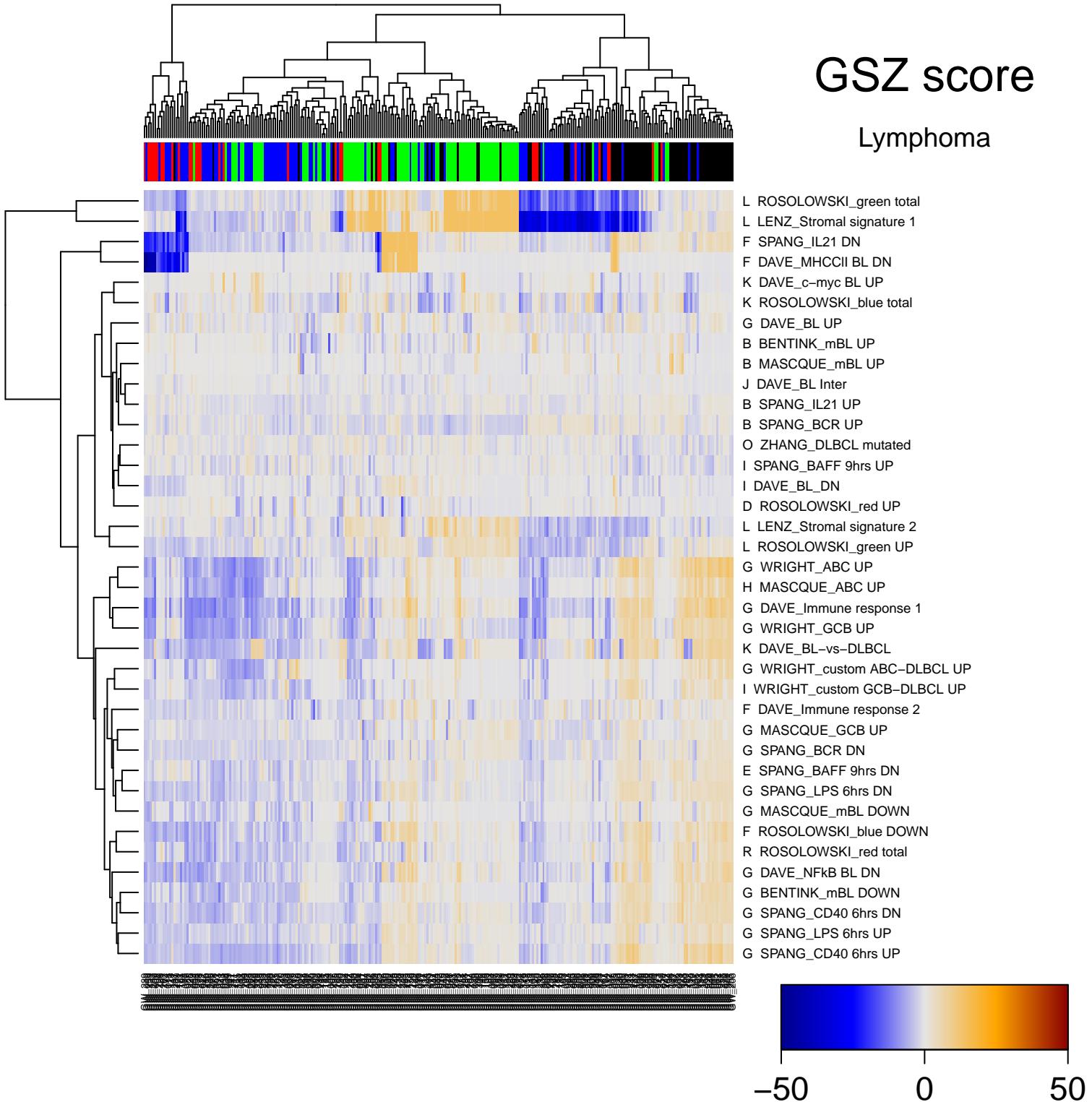
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H.Tiss



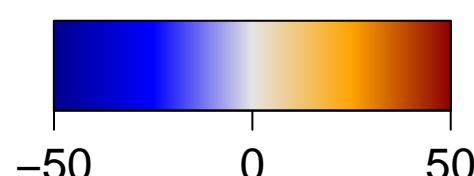
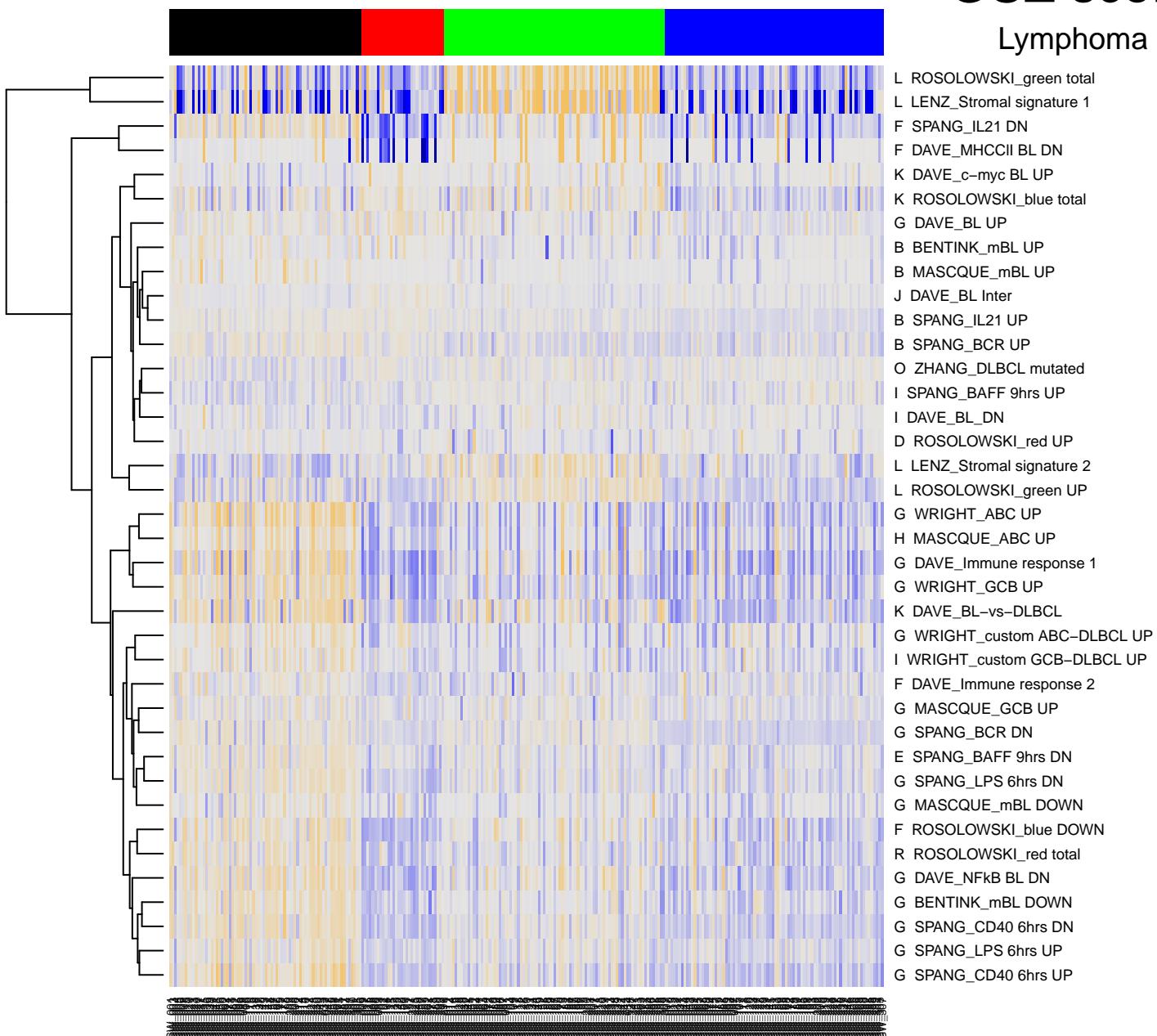
GSZ score

Lymphoma



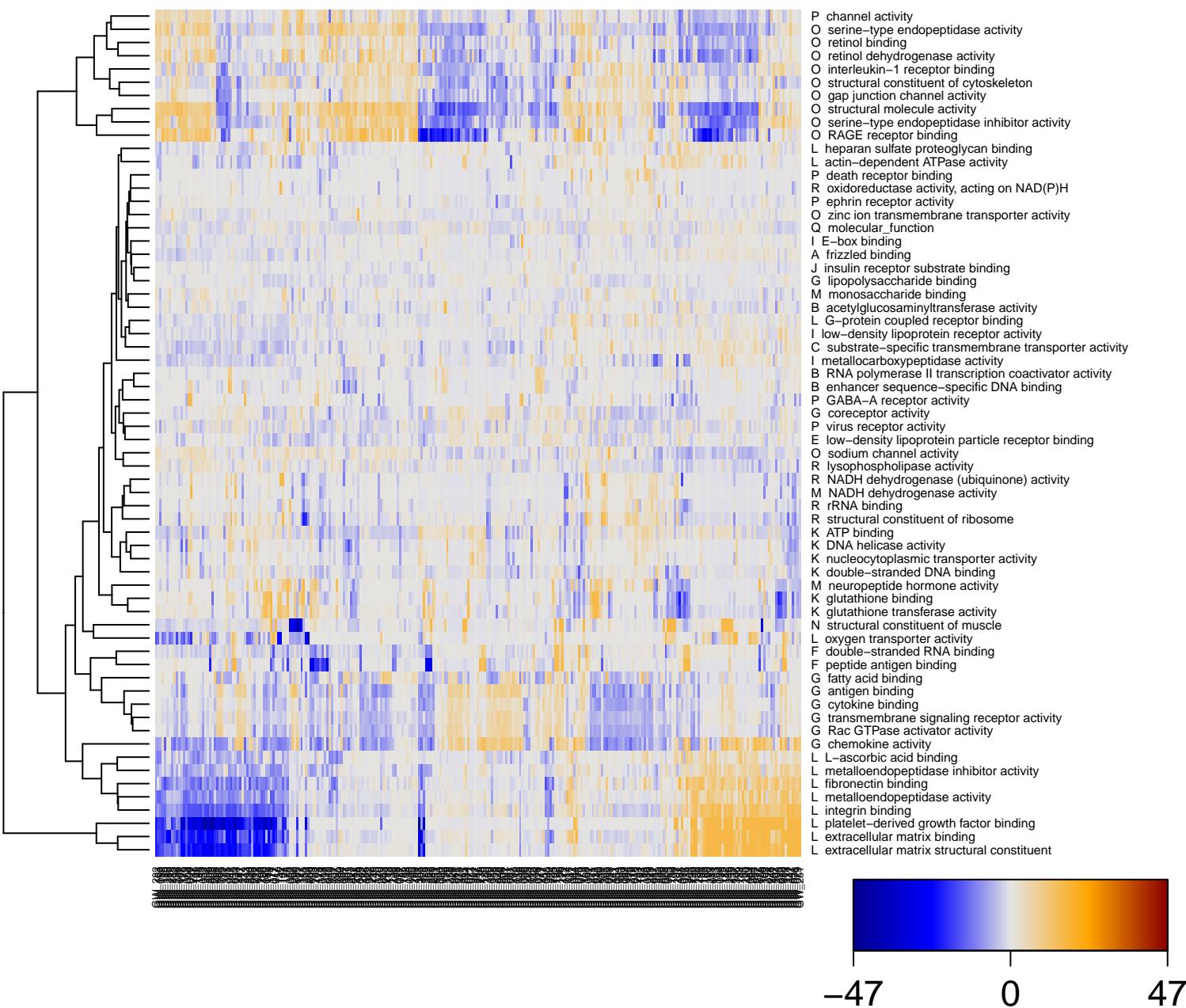
GSZ score

Lymphoma



GSZ score

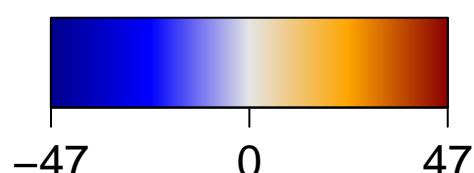
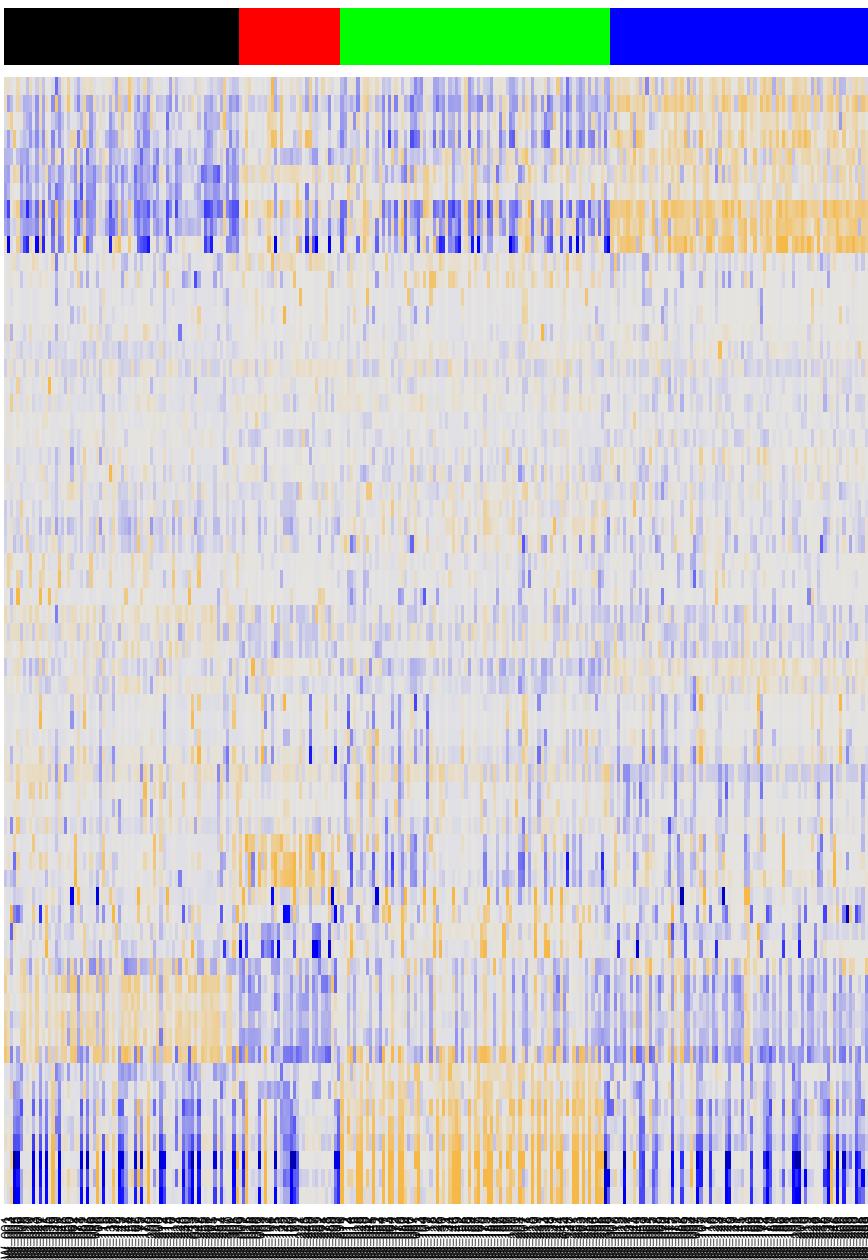
MF



GSZ score

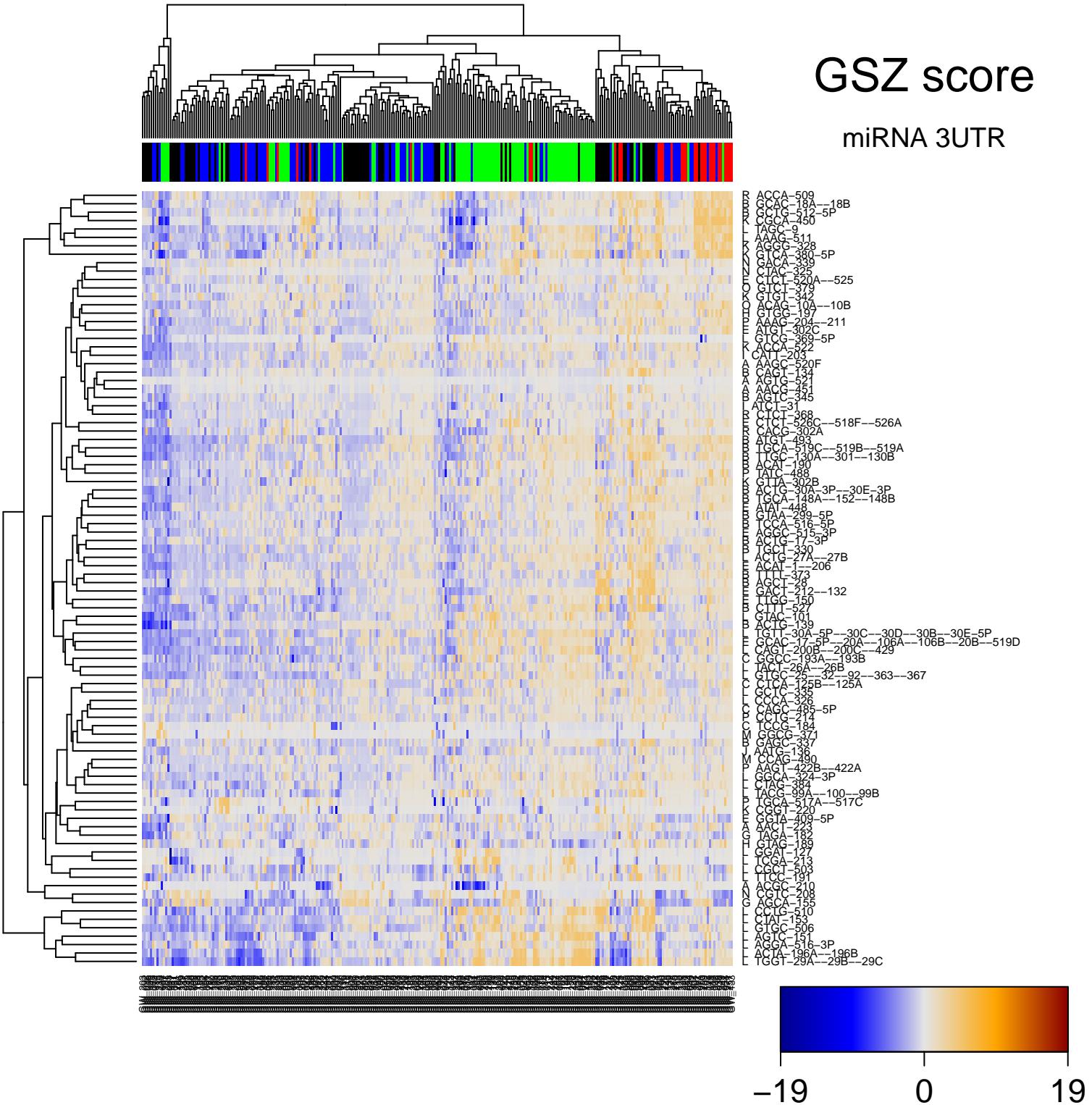
MF

- P channel activity
O serine-type endopeptidase activity
O retinol binding
O retinol dehydrogenase activity
O interleukin-1 receptor binding
O structural constituent of cytoskeleton
O gap junction channel activity
O structural molecule activity
O serine-type endopeptidase inhibitor activity
O RAGE receptor binding
L heparan sulfate proteoglycan binding
L actin-dependent ATPase activity
P death receptor binding
R oxidoreductase activity, acting on NAD(P)H
P ephrin receptor activity
O zinc ion transmembrane transporter activity
Q molecular_function
I E-box binding
A frizzled binding
J insulin receptor substrate binding
G lipopolysaccharide binding
M monosaccharide binding
B acetylglucosaminyltransferase activity
L G-protein coupled receptor binding
I low-density lipoprotein receptor activity
C substrate-specific transmembrane transporter activity
I metallocarboxypeptidase activity
B RNA polymerase II transcription coactivator activity
B enhancer sequence-specific DNA binding
P GABA-A receptor activity
G coreceptor activity
P virus receptor activity
E low-density lipoprotein particle receptor binding
O sodium channel activity
R lysophospholipase activity
R NADH dehydrogenase (ubiquinone) activity
M NADH dehydrogenase activity
R rRNA binding
R structural constituent of ribosome
K ATP binding
K DNA helicase activity
K nucleocytoplasmic transporter activity
K double-stranded DNA binding
M neuropeptide hormone activity
K glutathione binding
K glutathione transferase activity
N structural constituent of muscle
L oxygen transporter activity
F double-stranded RNA binding
F peptide antigen binding
G fatty acid binding
G antigen binding
G cytokine binding
G transmembrane signaling receptor activity
G Rac GTPase activator activity
G chemokine activity
L L-ascorbic acid binding
L metalloendopeptidase inhibitor activity
L fibronectin binding
L metalloendopeptidase activity
L integrin binding
L platelet-derived growth factor binding
L extracellular matrix binding
L extracellular matrix structural constituent



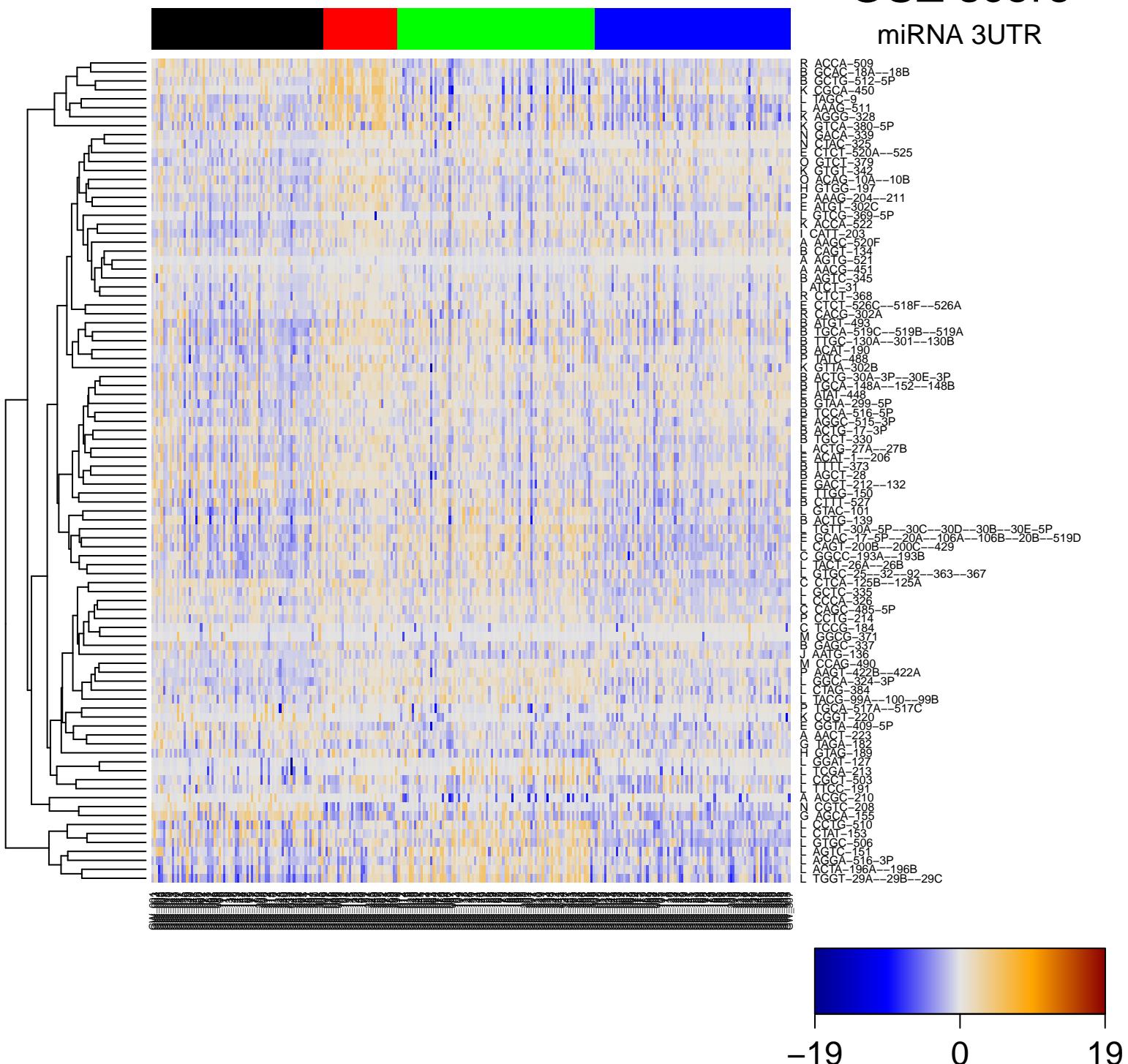
GSZ score

miRNA 3UTR



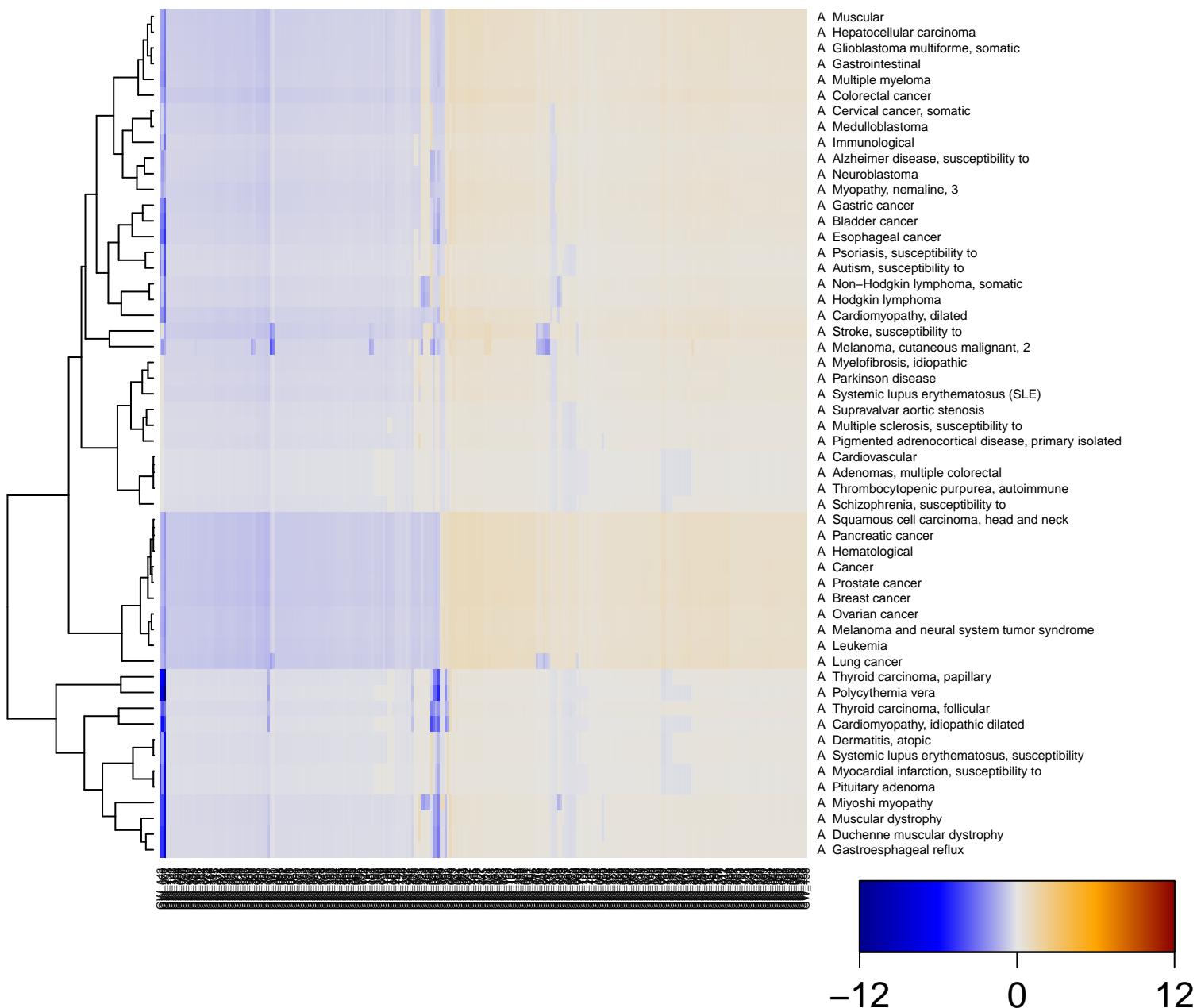
GSZ score

miRNA 3UTR



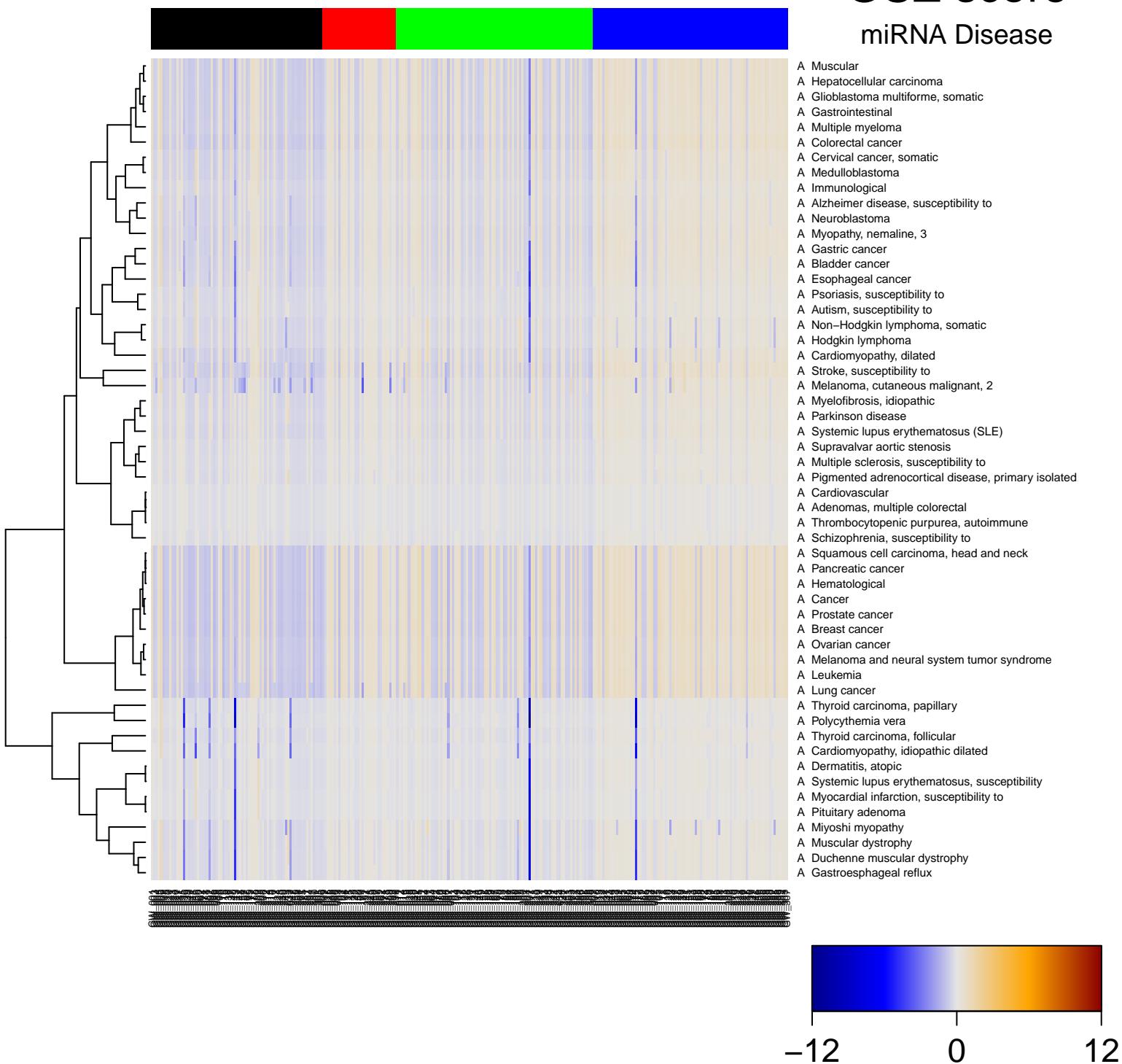
GSZ score

miRNA Disease



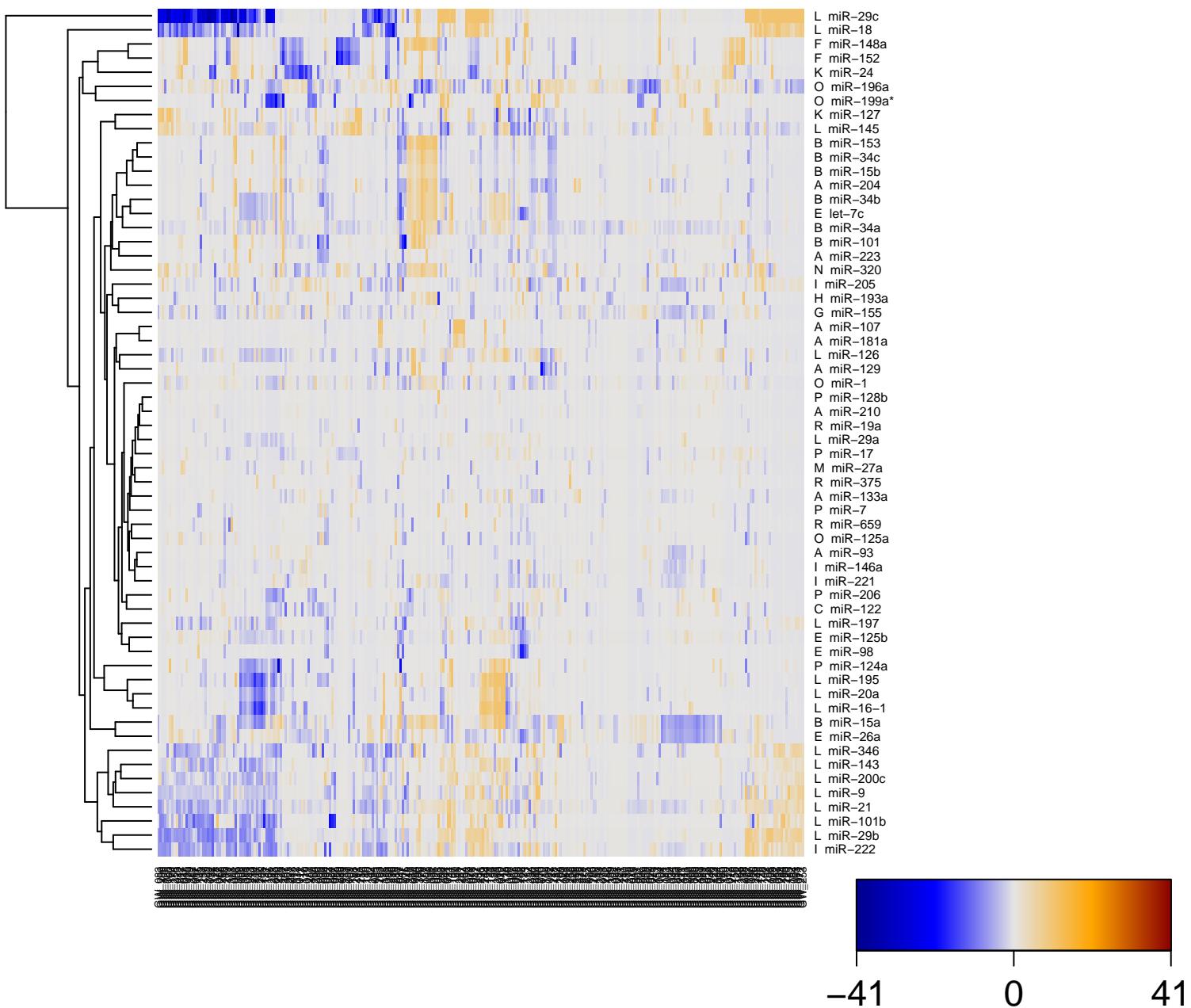
GSZ score

miRNA Disease



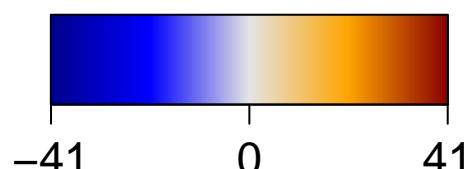
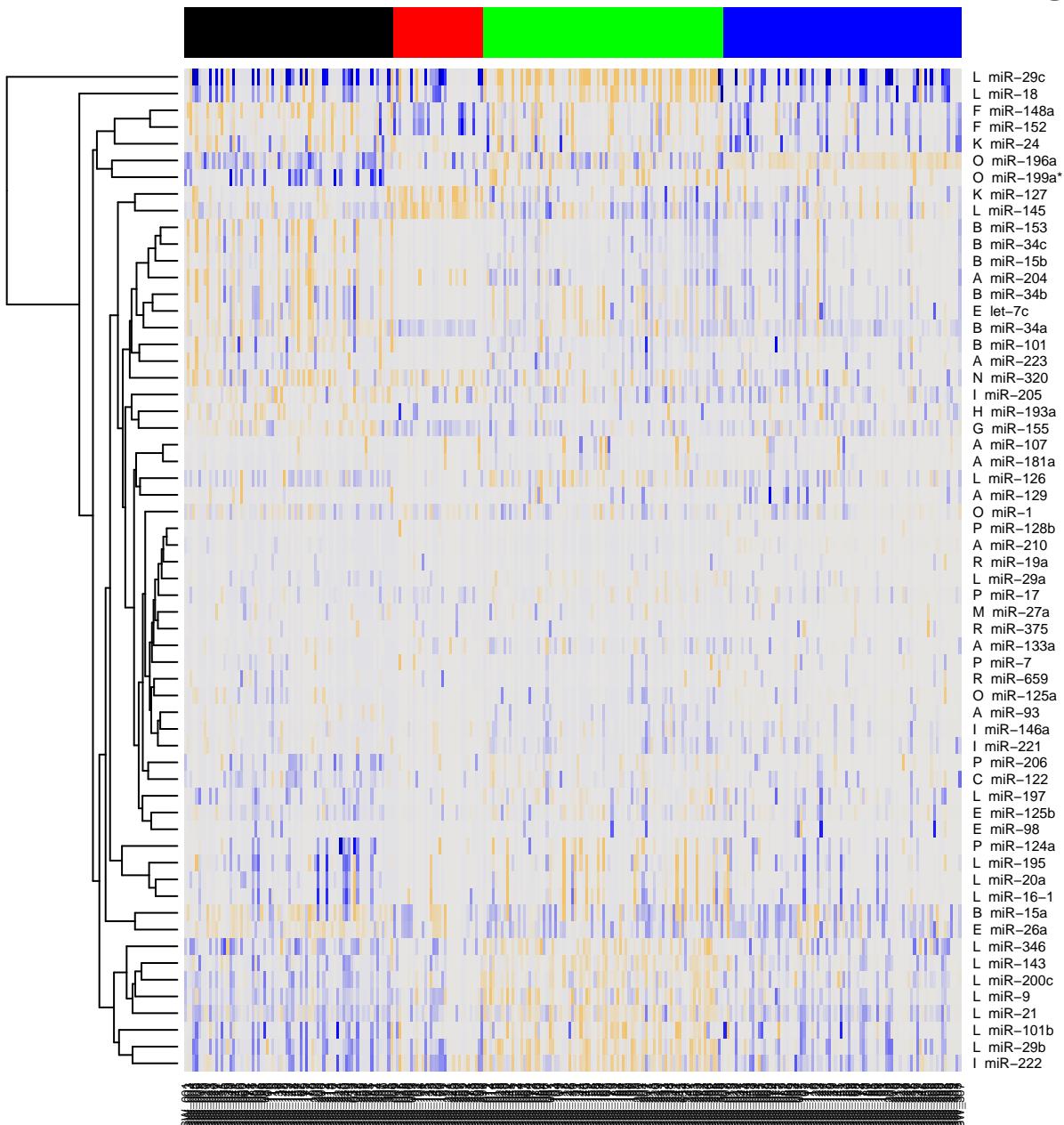
GSZ score

miRNA target



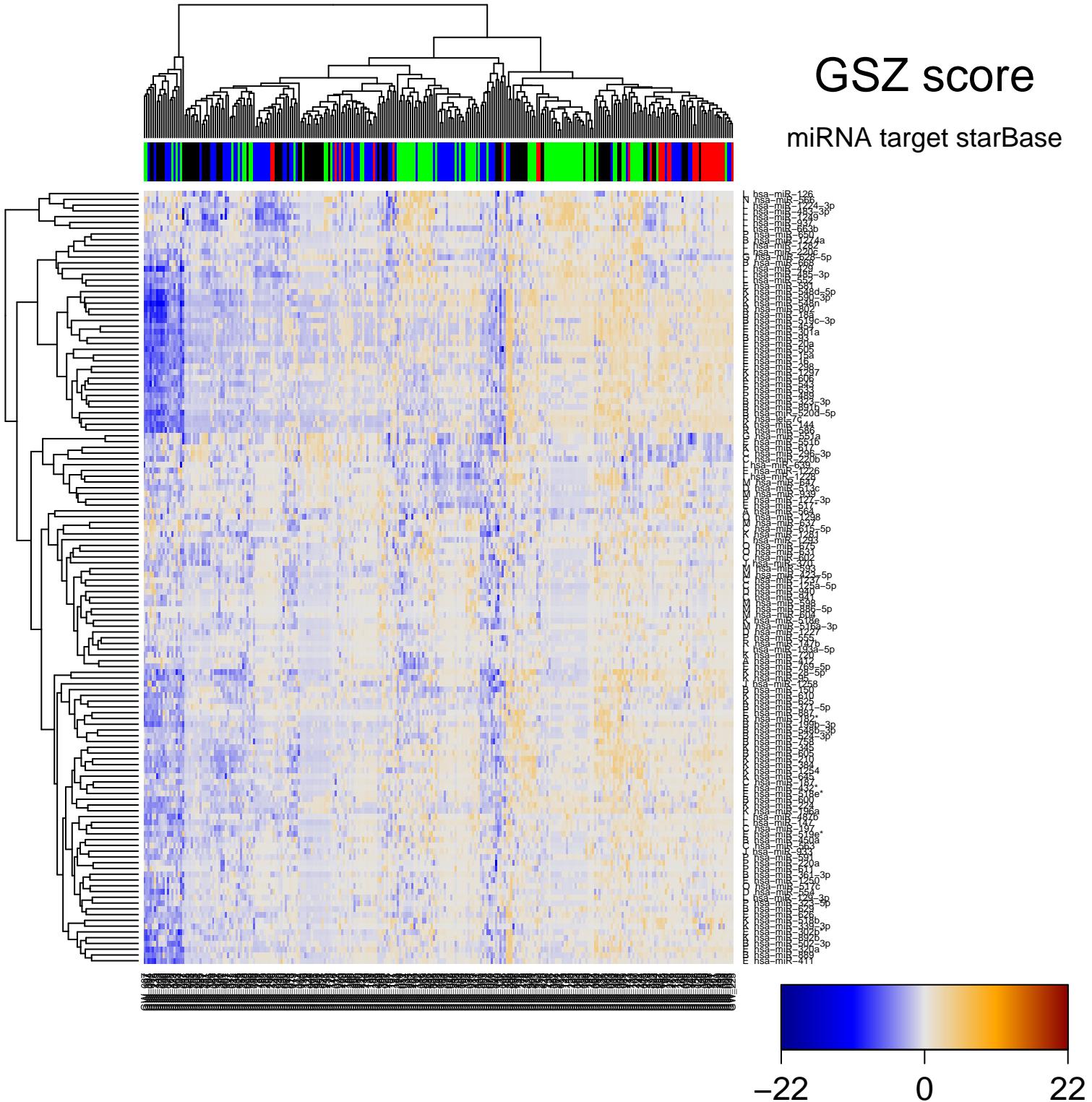
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miRNA target



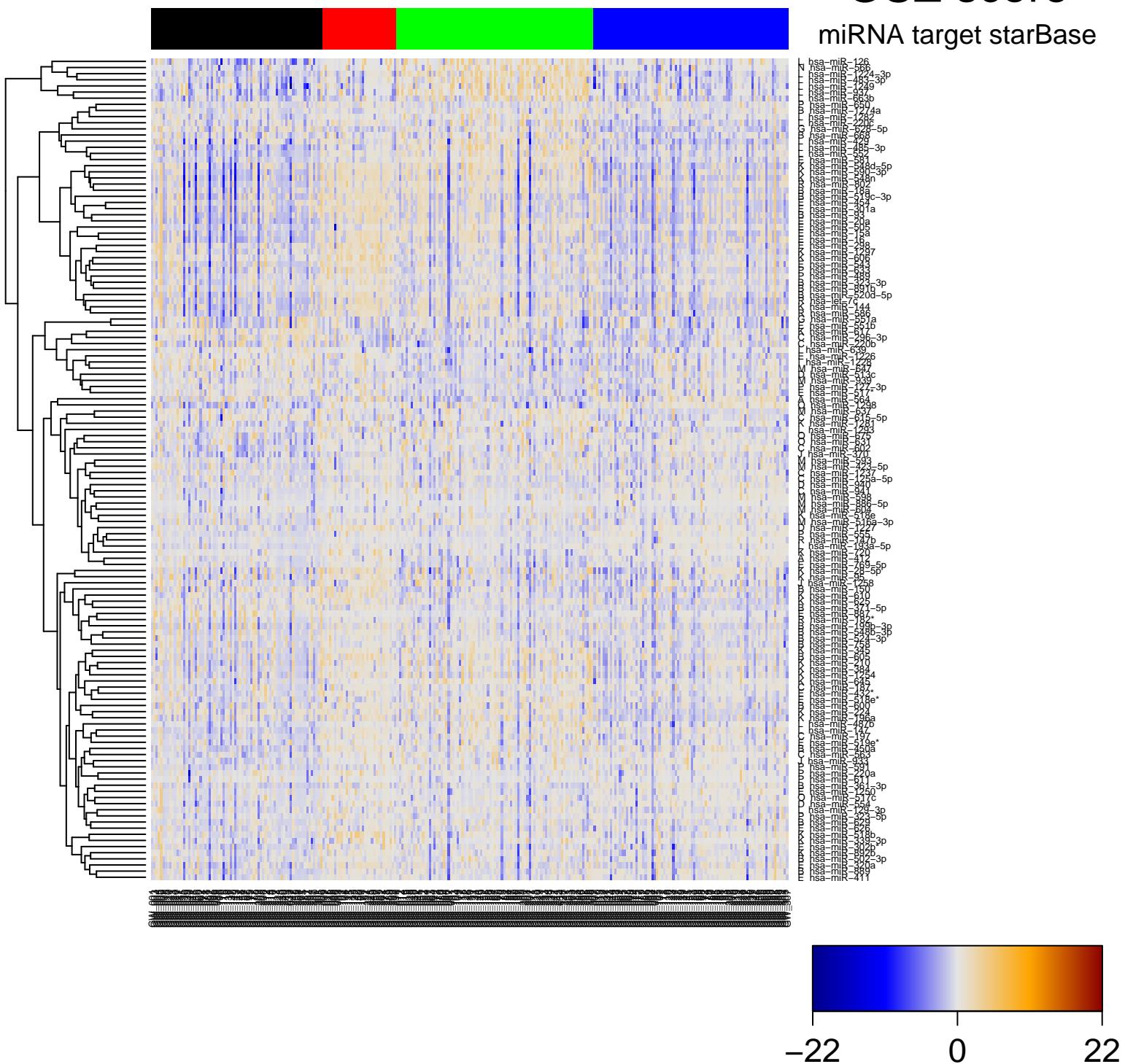
GSZ score

miRNA target starBase



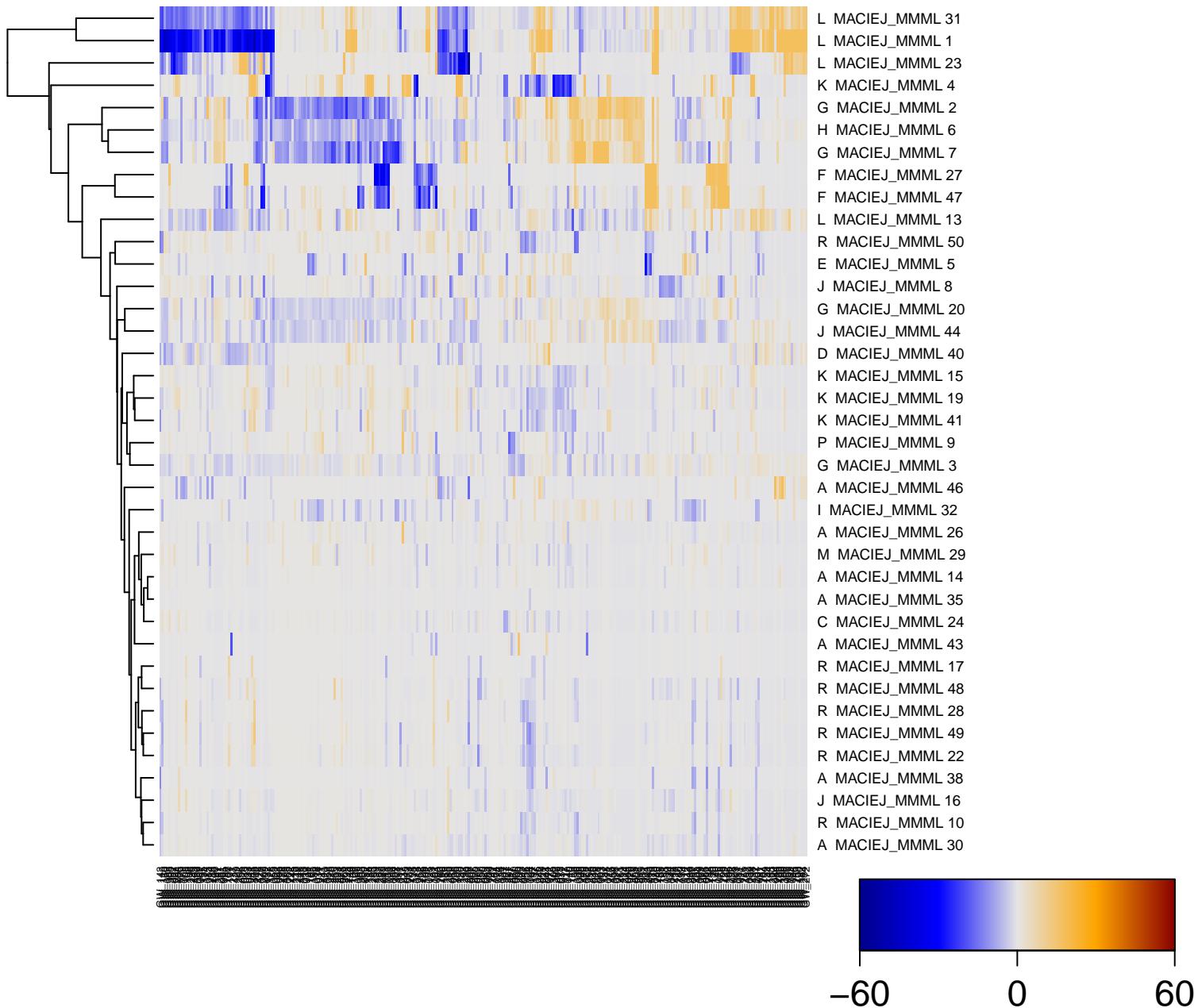
GSZ score

miRNA target starBase



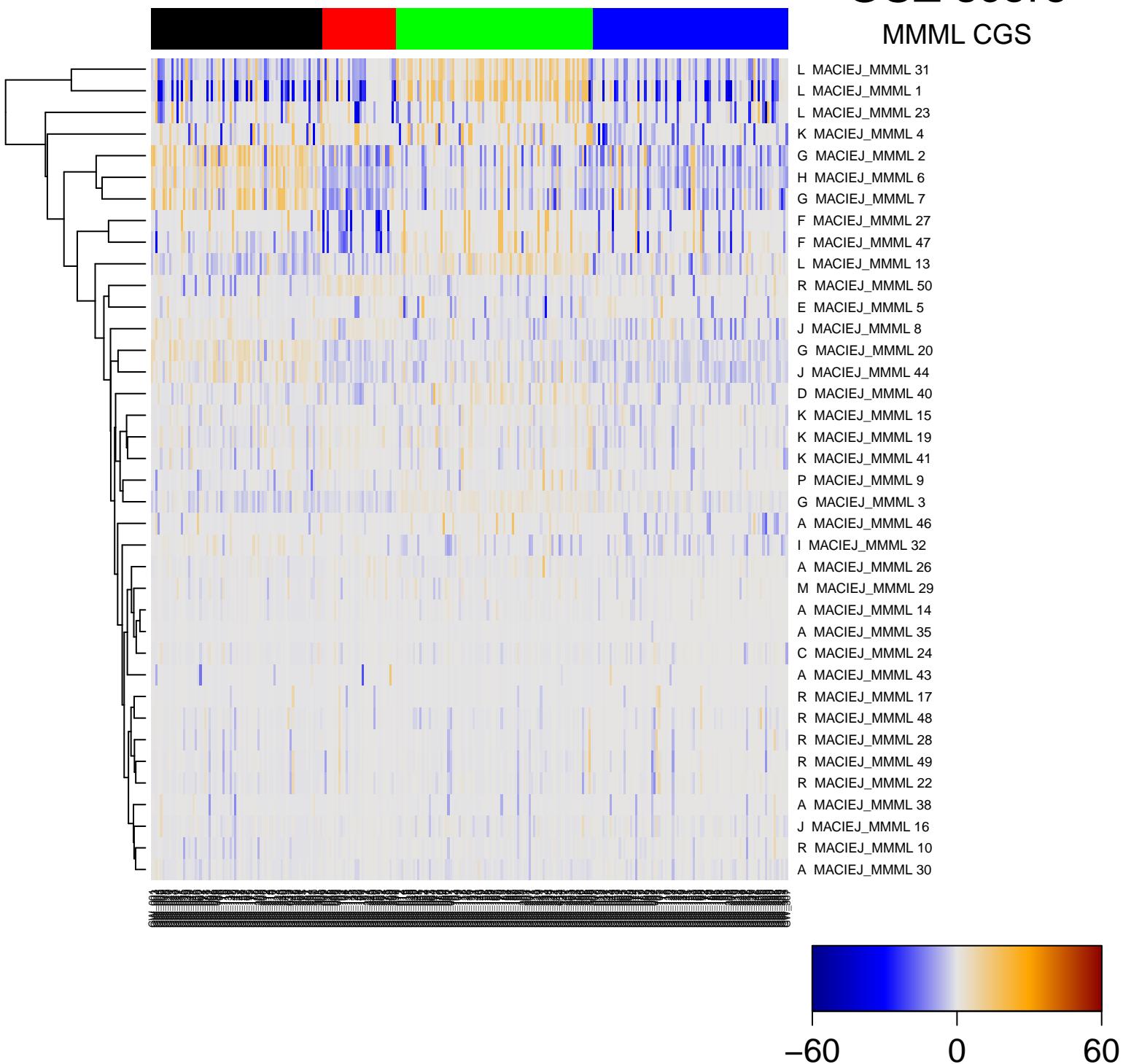
GSZ score

MMML CGS



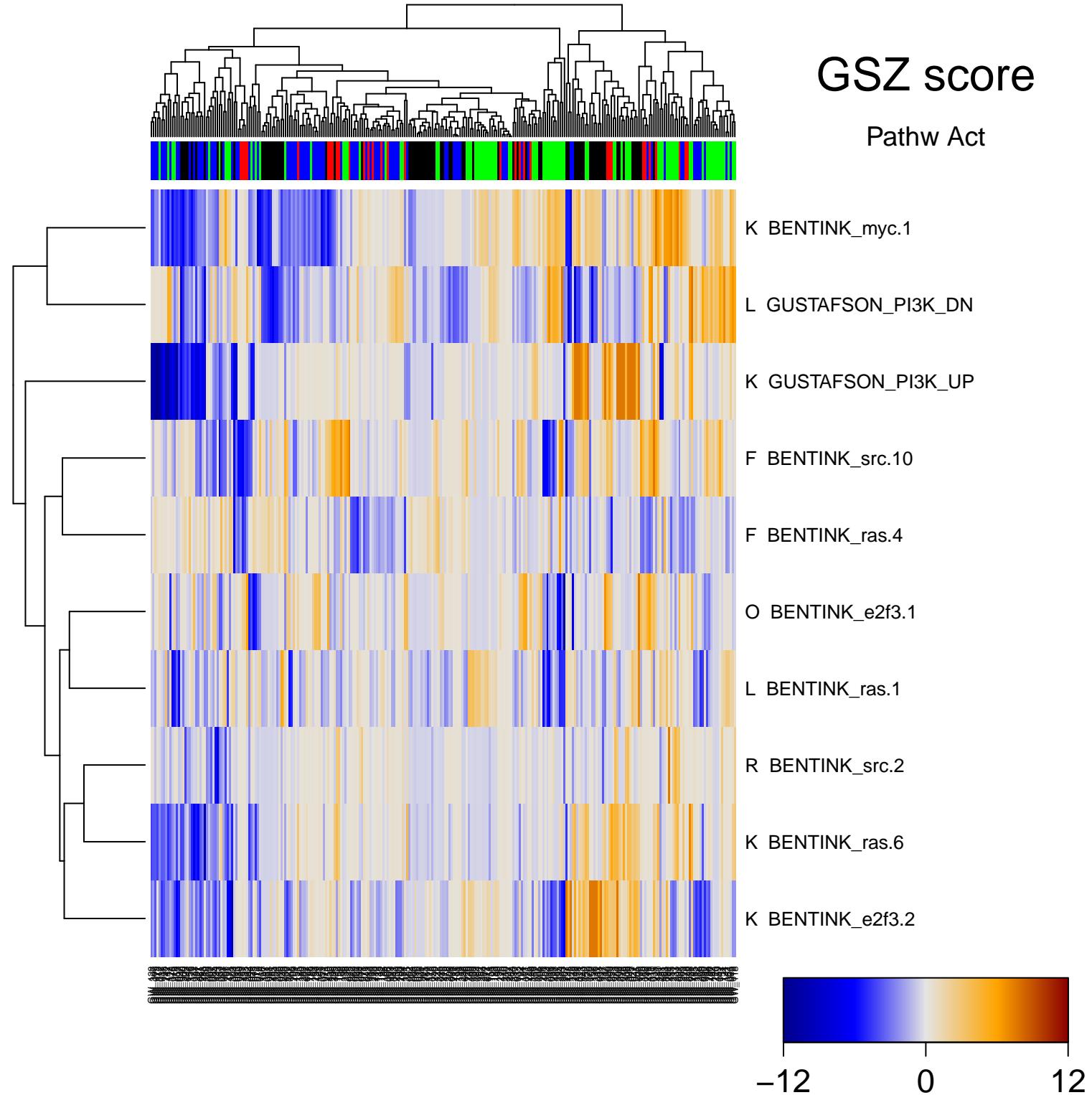
GSZ score

MMML CGS



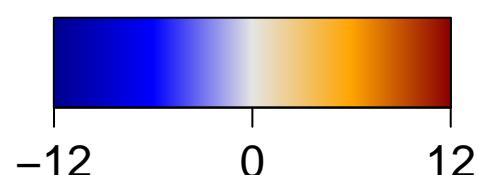
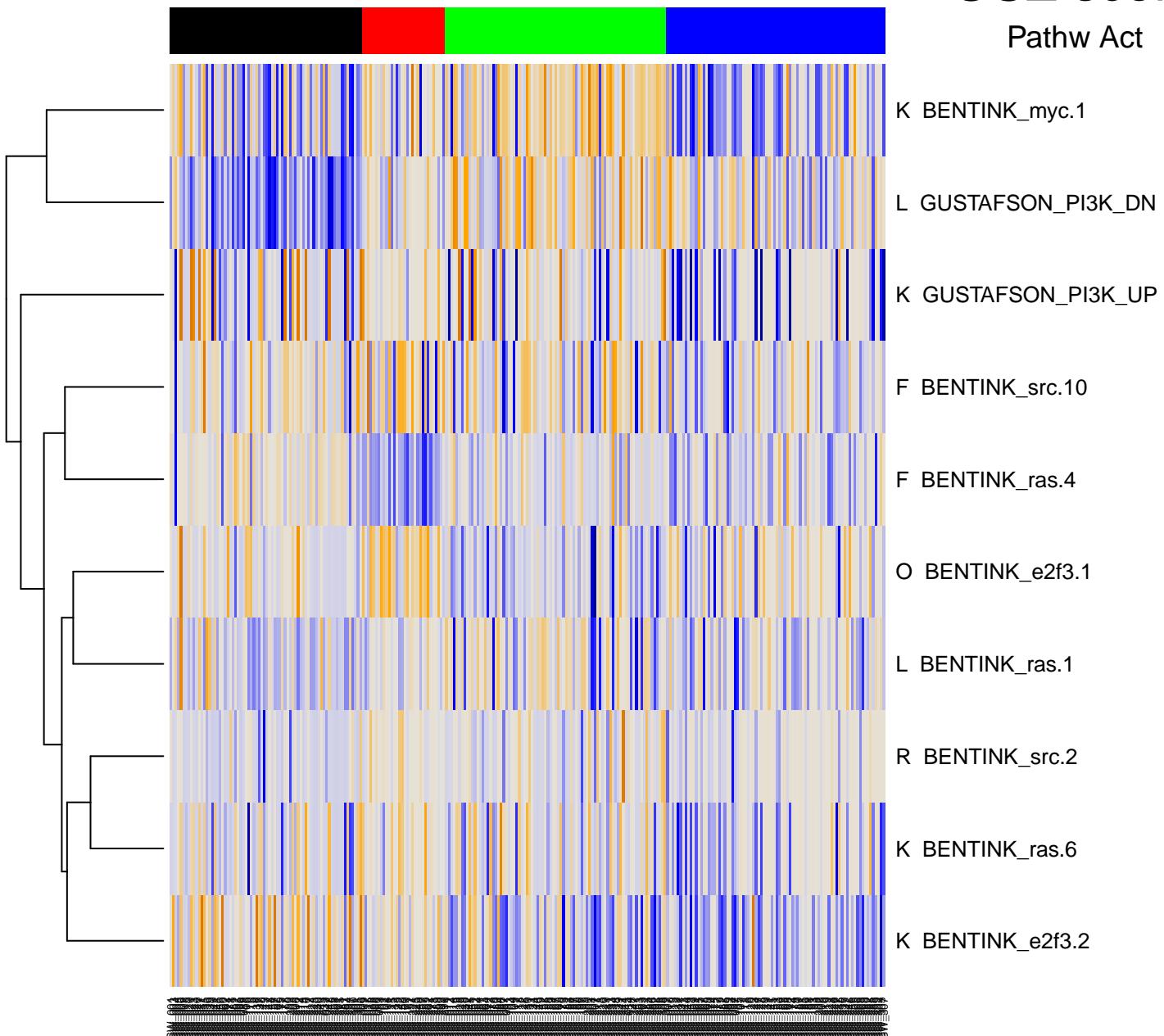
GSZ score

Pathw Act



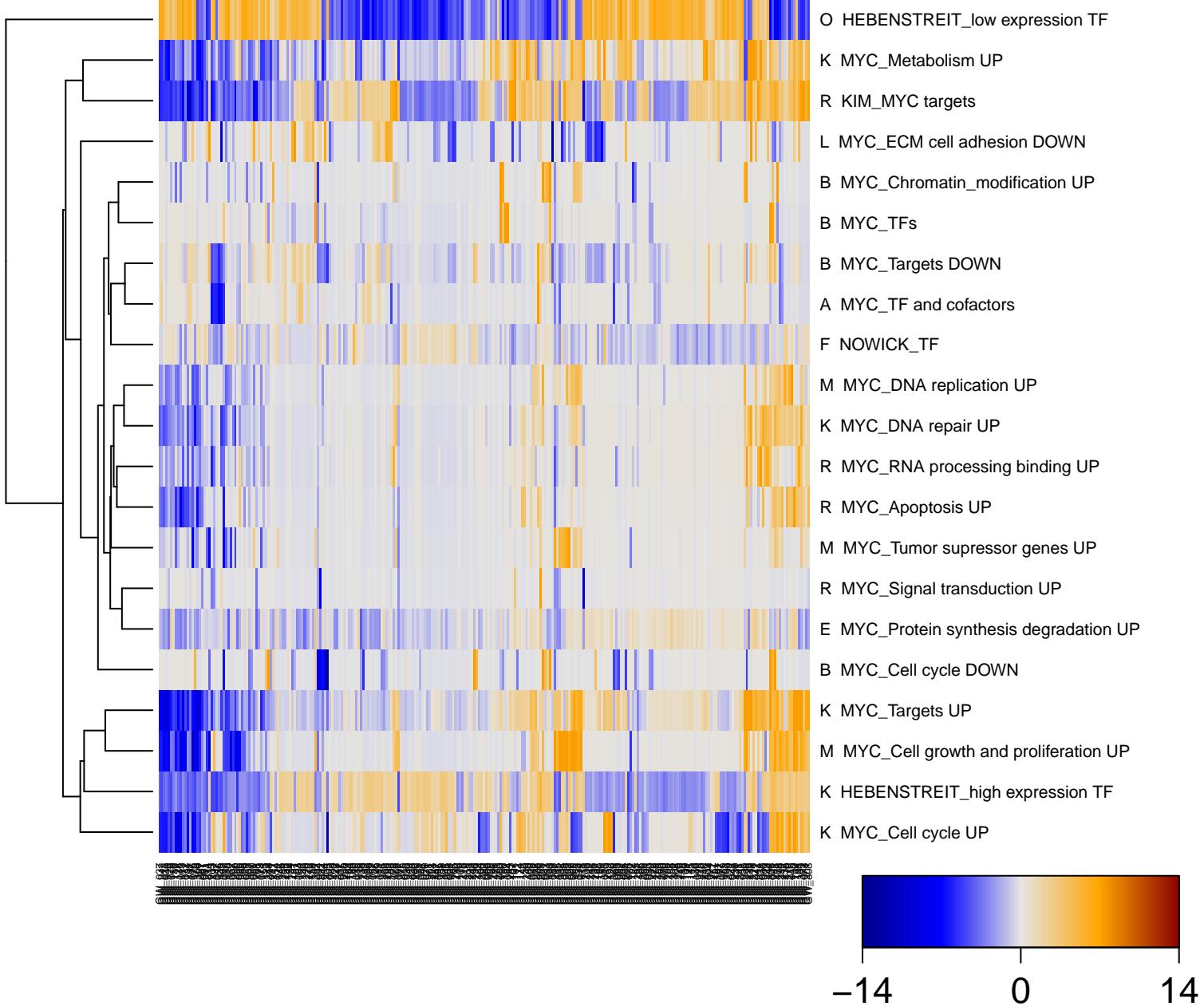
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Pathw Act



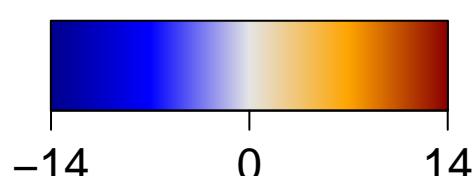
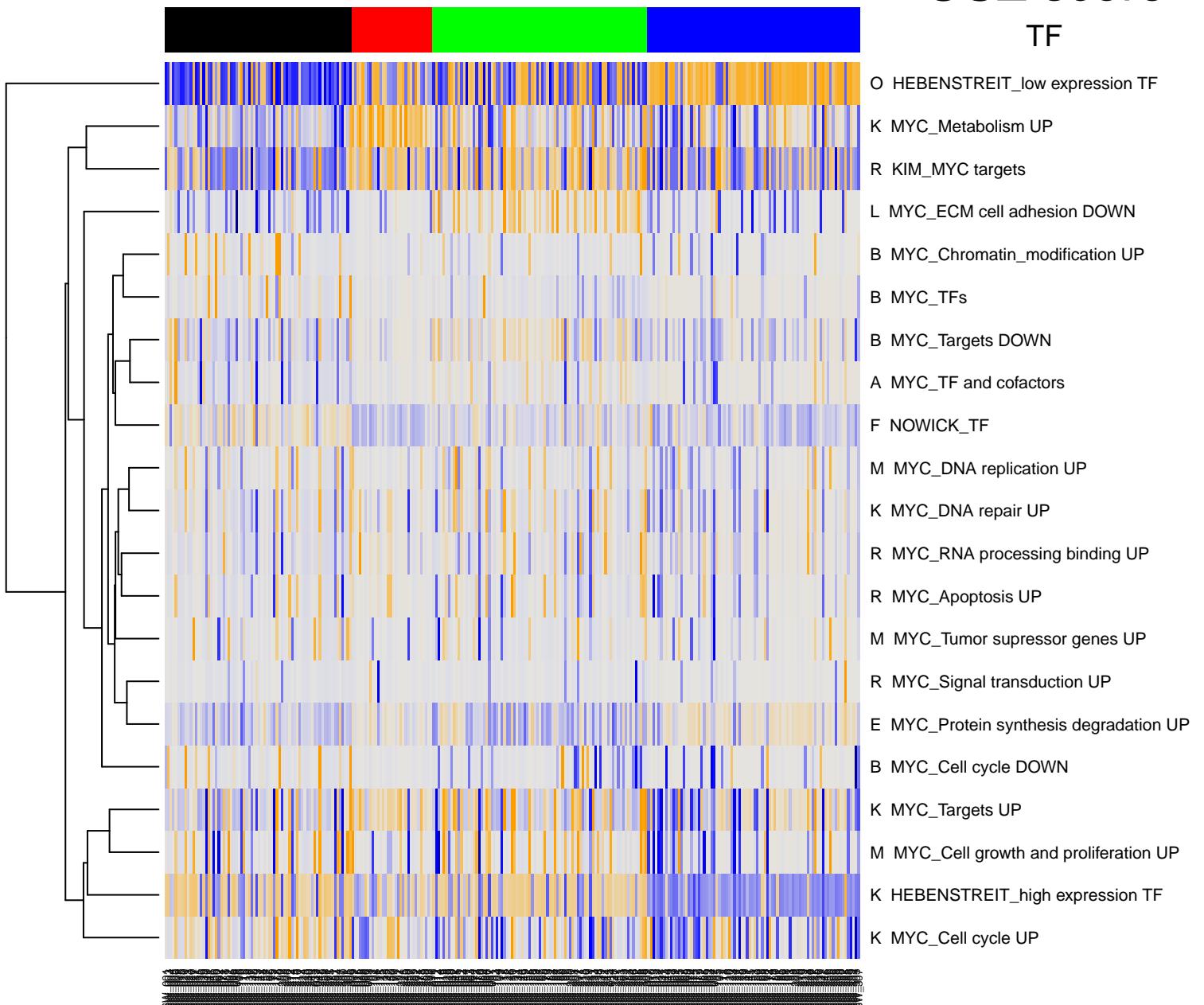
GSZ score

TF



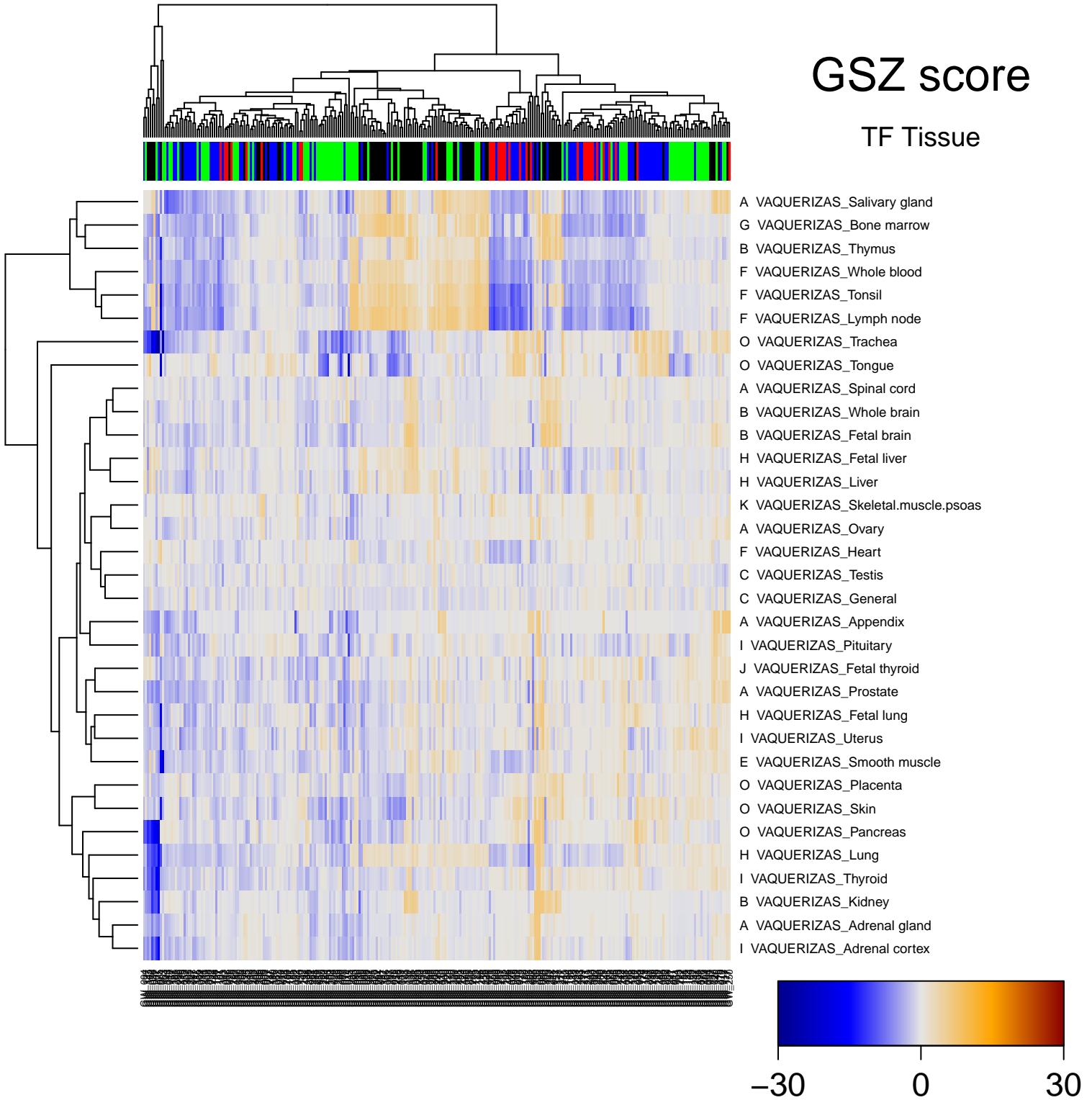
GSZ score

TF



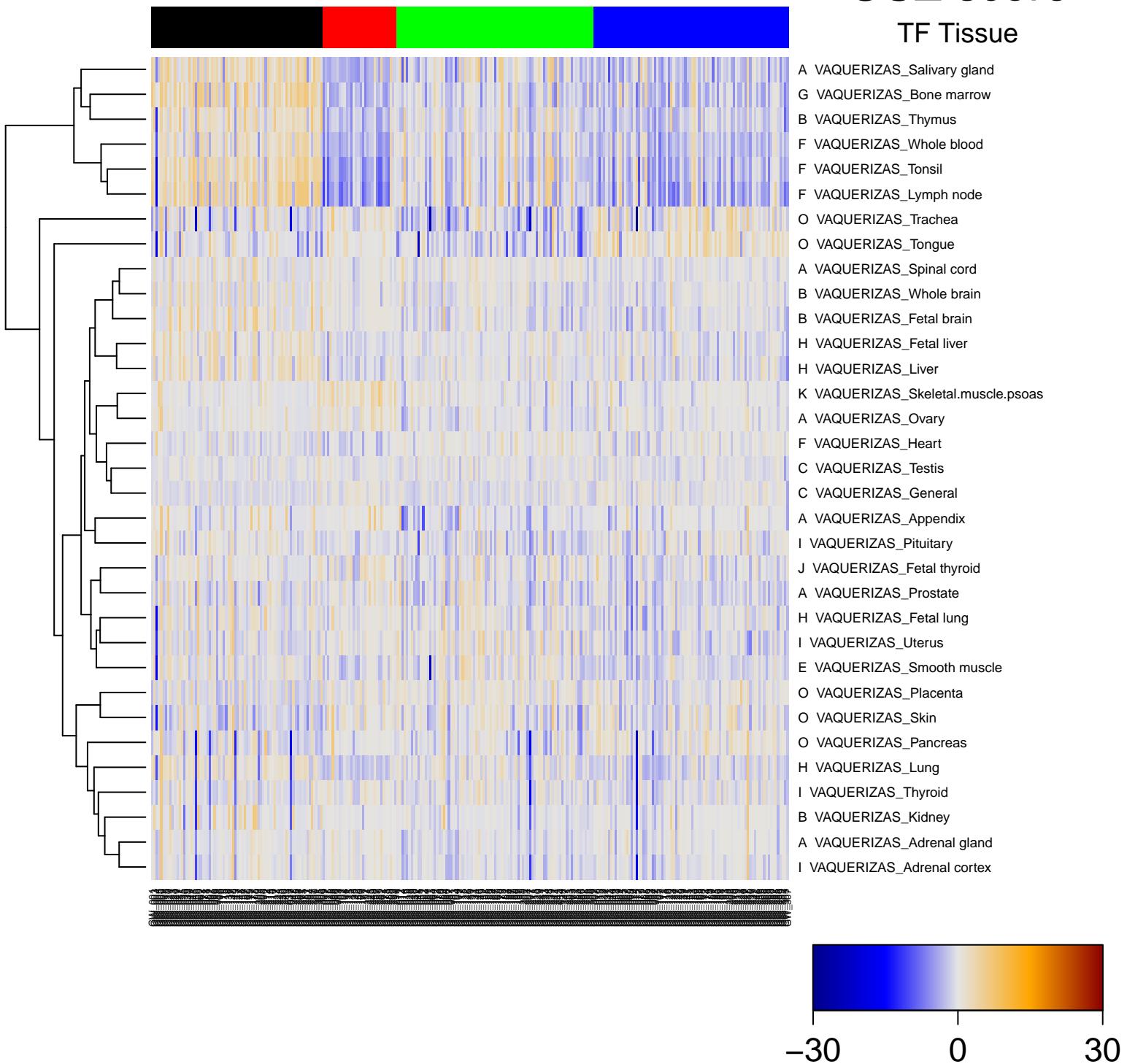
GSZ score

TF Tissue



GSZ score

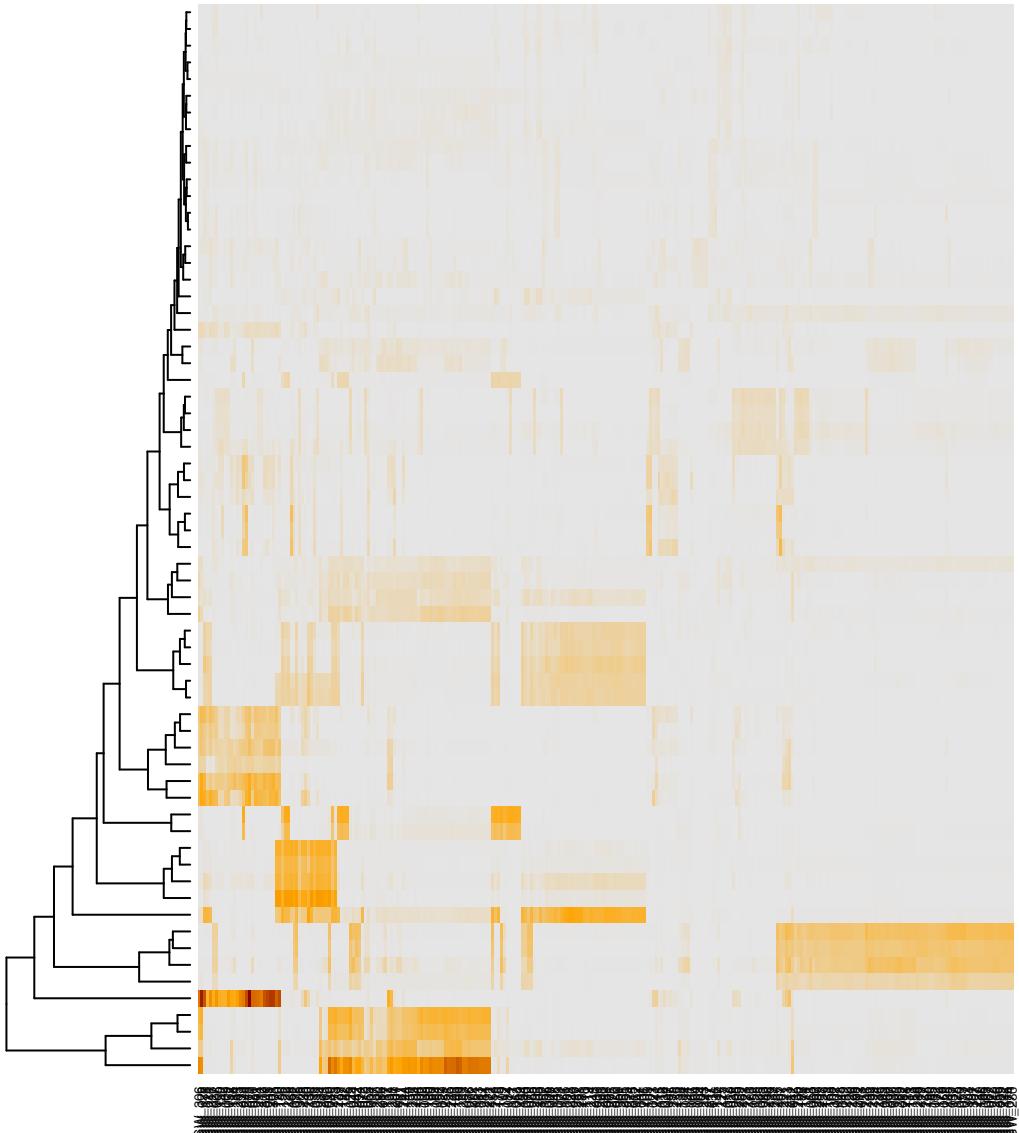
TF Tissue



$\log(p\text{.value})$

BP

- A drug metabolic process
A epoxigenase P450 pathway
I calcium-independent cell-cell adhesion
A negative regulation of epithelial to mesenchymal transition
A urogenital system development
A somitogenesis
A iron ion transport
I cellular response to thyroid hormone stimulus
B positive regulation of transcription from RNA polymerase II promoter
B negative regulation of neuron differentiation
B thymus development
B cilium morphogenesis
B transcription, DNA-templated
B regulation of transcription, DNA-dependent
Q spermatogenesis
Q biological_process
L cell differentiation
I complement activation
P oxidation-reduction process
K DNA recombination
O skin development
L hemidesmosome assembly
N cardiac muscle contraction
K glutathione metabolic process
K glutathione derivative biosynthetic process
K xenobiotic metabolic process
R small molecule metabolic process
R viral process
R gene expression
M rRNA processing
R respiratory electron transport chain
R cellular metabolic process
R translation
L proteolysis
L negative regulation of cell proliferation
L blood coagulation
L angiogenesis
G cell surface receptor signaling pathway
G T cell receptor signaling pathway
G T cell costimulation
G antigen processing and presentation
G regulation of immune response
K DNA repair
K DNA strand elongation involved in DNA replication
K G1/S transition of mitotic cell cycle
K spindle organization
K mitosis
K DNA replication
N muscle filament sliding
N muscle contraction
F defense response to virus
F response to virus
F cytokine-mediated signaling pathway
F type I interferon signaling pathway
G immune response
O keratinocyte differentiation
O keratinization
O epidermis development
O peptide cross-linking
K mitotic cell cycle
L extracellular matrix disassembly
L collagen catabolic process
L cell adhesion
L extracellular matrix organization

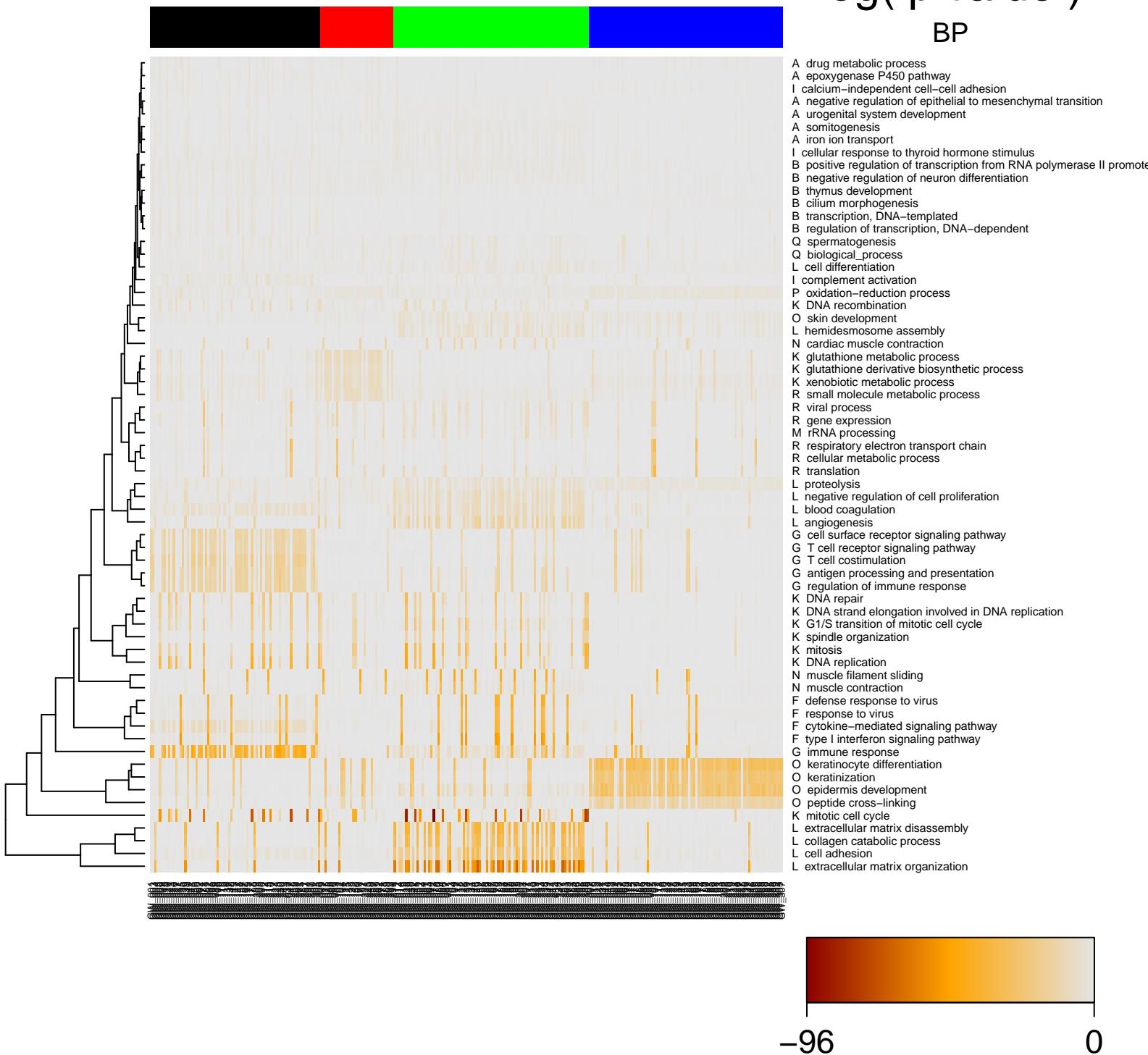


-96

0

log(p.value)

BP



$\log(p\text{.value})$

Cancer

J WANG_ER_UP
I LIU_PROSTATE_CANCER_UP
P GENTLES_modul8
I SOTIRIOU_BREAST_CANCER_GRADE_1_VS_3_DN
E GENTLES_modul14
I BEN-PORATH_DN
K LIU_COMMON_CANCER_GENES
A LIU_LIVER_CANCER
N WANG_ER_DN
B LIU_BREAST_CANCER
B GENTLES_modul12
L GENTLES_modul16
M GENTLES_modul2
M GENTLES_modul7
M GENTLES_modul1
R ZHANG_MM up
K GENTLES_modul4
R GENTLES_modul10
R GENTLES_modul5
L GENTLES_modul11
G ZHANG_MGUS up
I GENTLES_modul13
K KUIPER_MM good survival
K KUIPER_MM poor survival
K BEN-PORATH_UP
K GENTLES_modul3
K GENTLES_modul6
K RHODES_CANCER_META_SIGNATURE
A LIU_PROSTATE_CANCER_DN
I GENTLES_modul17
F SPANG_LPS-index2
K SOTIRIOU_BREAST_CANCER_GRADE_1_VS_3_UP
K WOLFER_overlap genes
K RHODES_UNDIFFERENTIATED_CANCER
K SHAUGHNESSY_MM high risk
G SPANG_BCL6-index2
G GENTLES_modul18
K Lembcke_Normal vs Adenoma
G Lembcke_Colon Inflammation

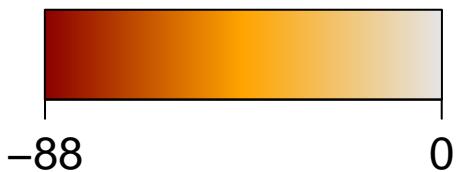
-88

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log(p.value)

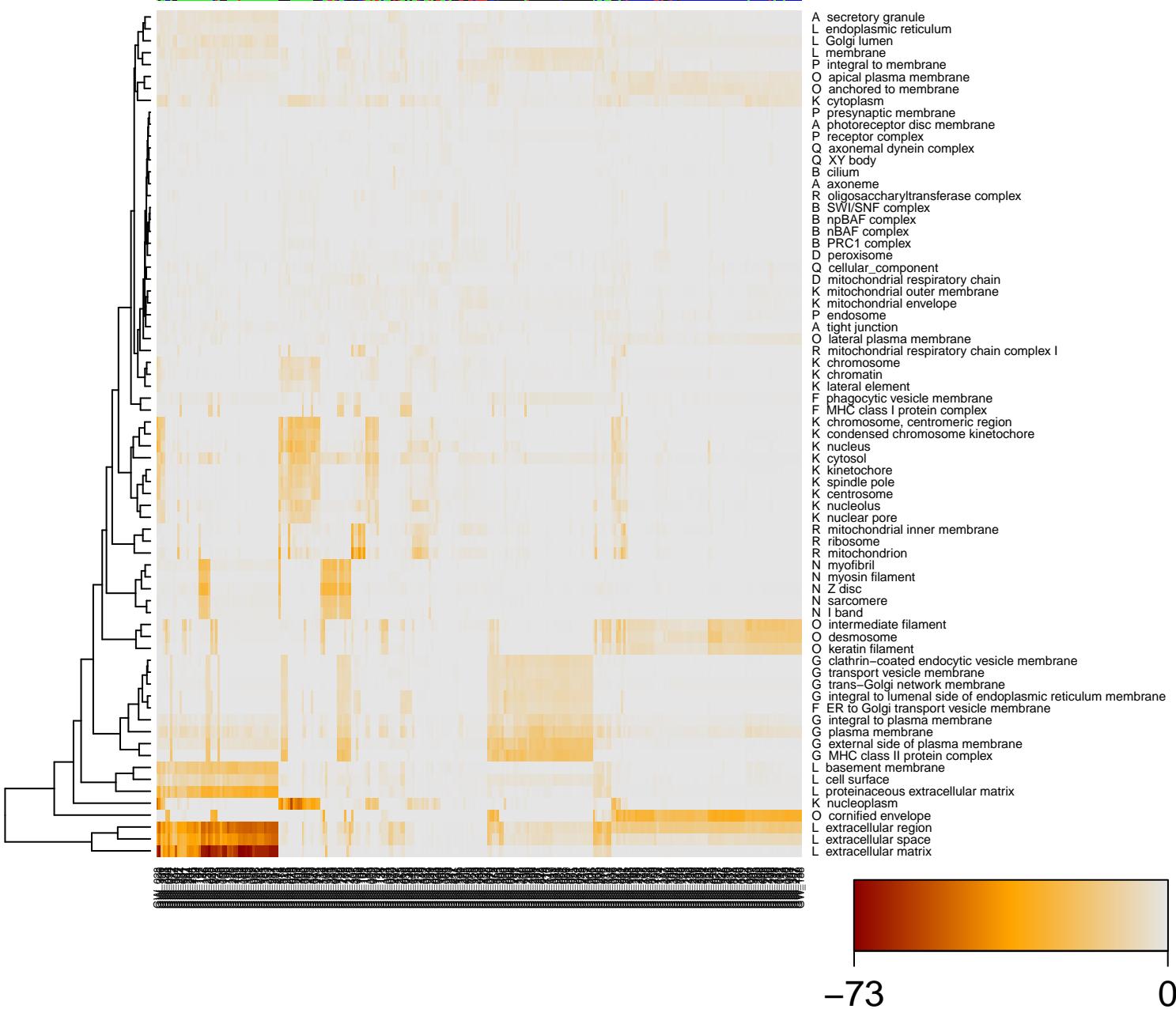
Cancer

- J WANG_ER_UP
- I LIU_PROSTATE_CANCER_UP
- P GENTLES_modul8
- I SOTIRIOU_BREAST_CANCER_GRADE_1_VS_3_DN
- E GENTLES_modul14
- I BEN-PORATH_DN
- K LIU_COMMON_CANCER_GENES
- A LIU_LIVER_CANCER
- N WANG_ER_DN
- B LIU_BREAST_CANCER
- B GENTLES_modul12
- L GENTLES_modul16
- M GENTLES_modul2
- M GENTLES_modul7
- M GENTLES_modul1
- R ZHANG_MM up
- K GENTLES_modul4
- R GENTLES_modul10
- R GENTLES_modul5
- L GENTLES_modul11
- G ZHANG_MGUS up
- I GENTLES_modul13
- K KUIPER_MM good survival
- K KUIPER_MM poor survival
- K BEN-PORATH_UP
- K GENTLES_modul3
- K GENTLES_modul6
- K RHODES_CANCER_META_SIGNATURE
- A LIU_PROSTATE_CANCER_DN
- I GENTLES_modul17
- F SPANG_LPS-index2
- K SOTIRIOU_BREAST_CANCER_GRADE_1_VS_3_UP
- K WOLFER_overlap genes
- K RHODES_UNDIFFERENTIATED_CANCER
- K SHAUGHNESSY_MM high risk
- G SPANG_BCL6-index2
- G GENTLES_modul18
- K Lembcke_Normal vs Adenoma
- G Lembcke_Colonic Inflammation



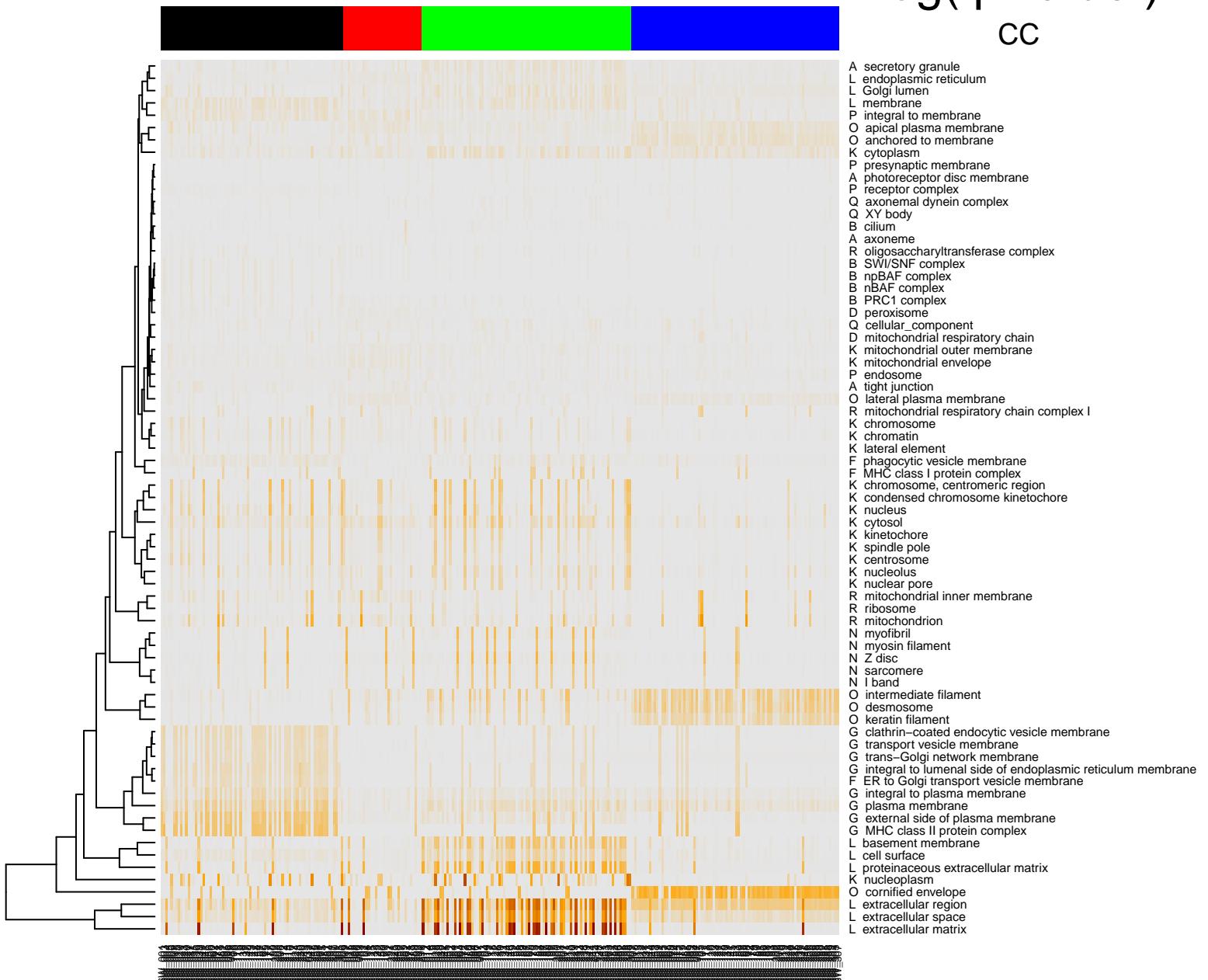
$\log(p\text{.value})$

CC



log(p.value)

CC

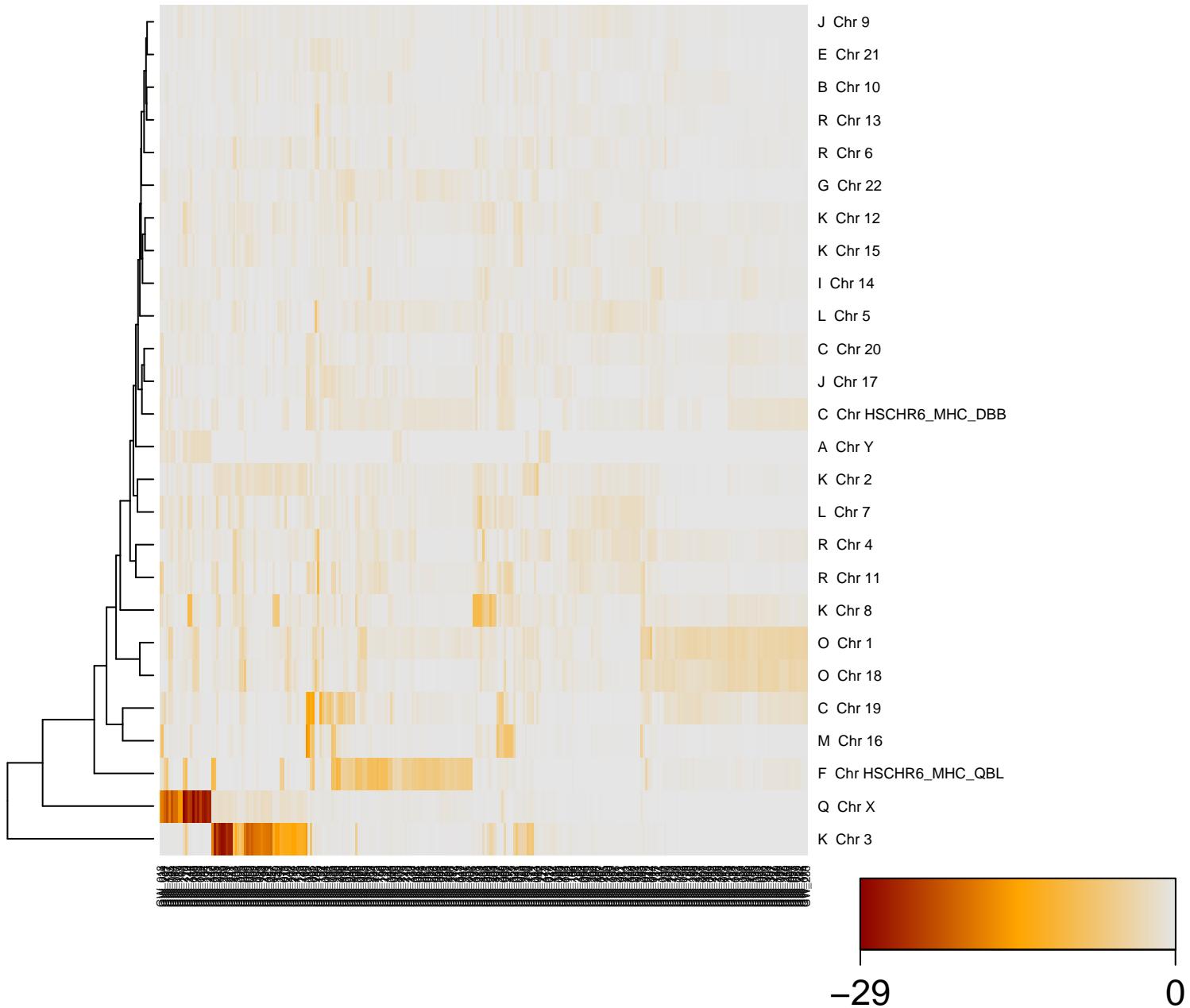


-73

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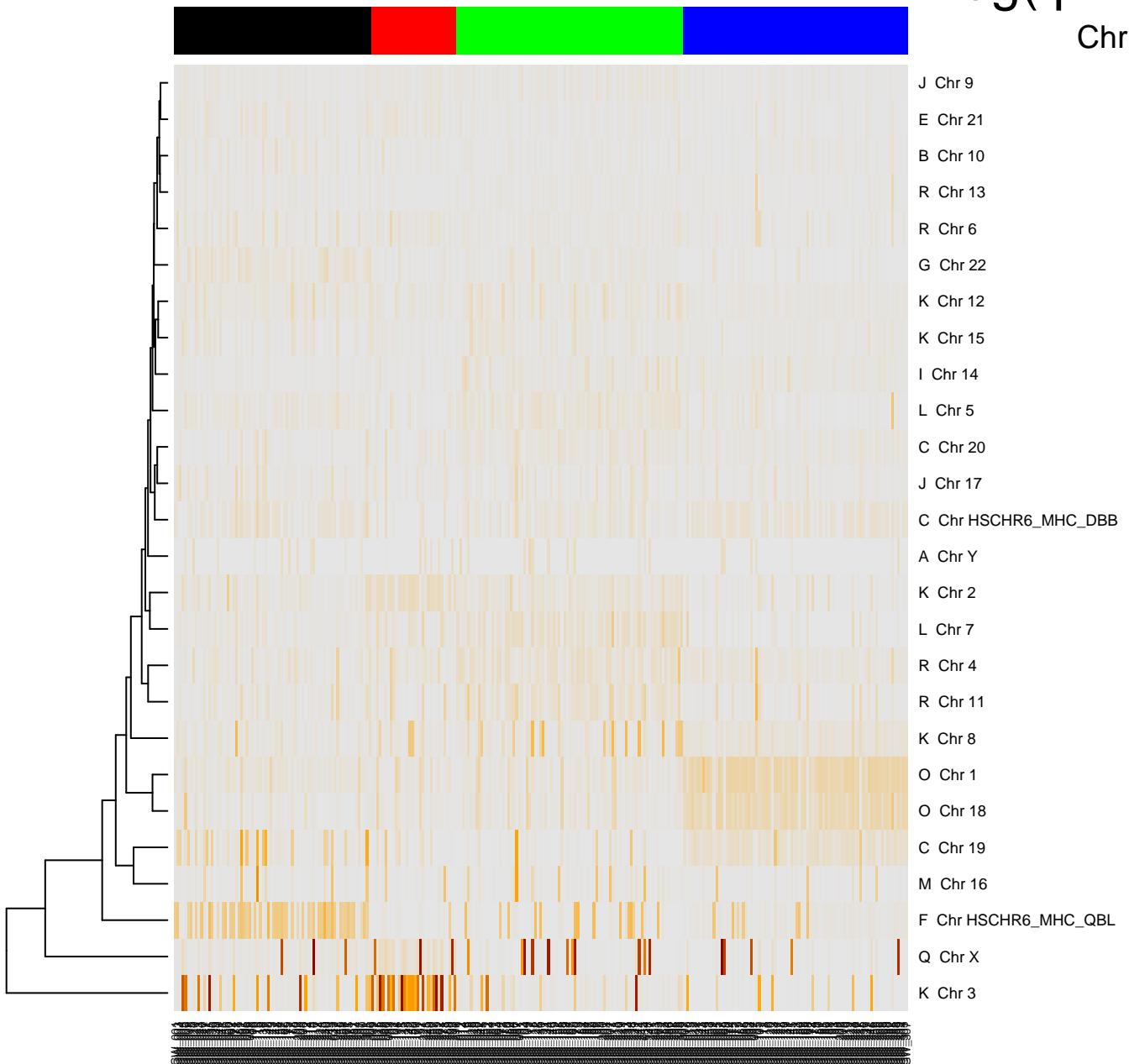
$\log(p\text{.value})$

Chr



$\log(\text{p.value})$

Chr



-29

0

$\log(p\text{.value})$

Disease

O GUDJ_psoriasis up

A GUDJ_psoriasis down

A BCHE TNIA_EBM up

O BCHE TNIA_EBM-DM up

A BCHE TNIA_EBM down

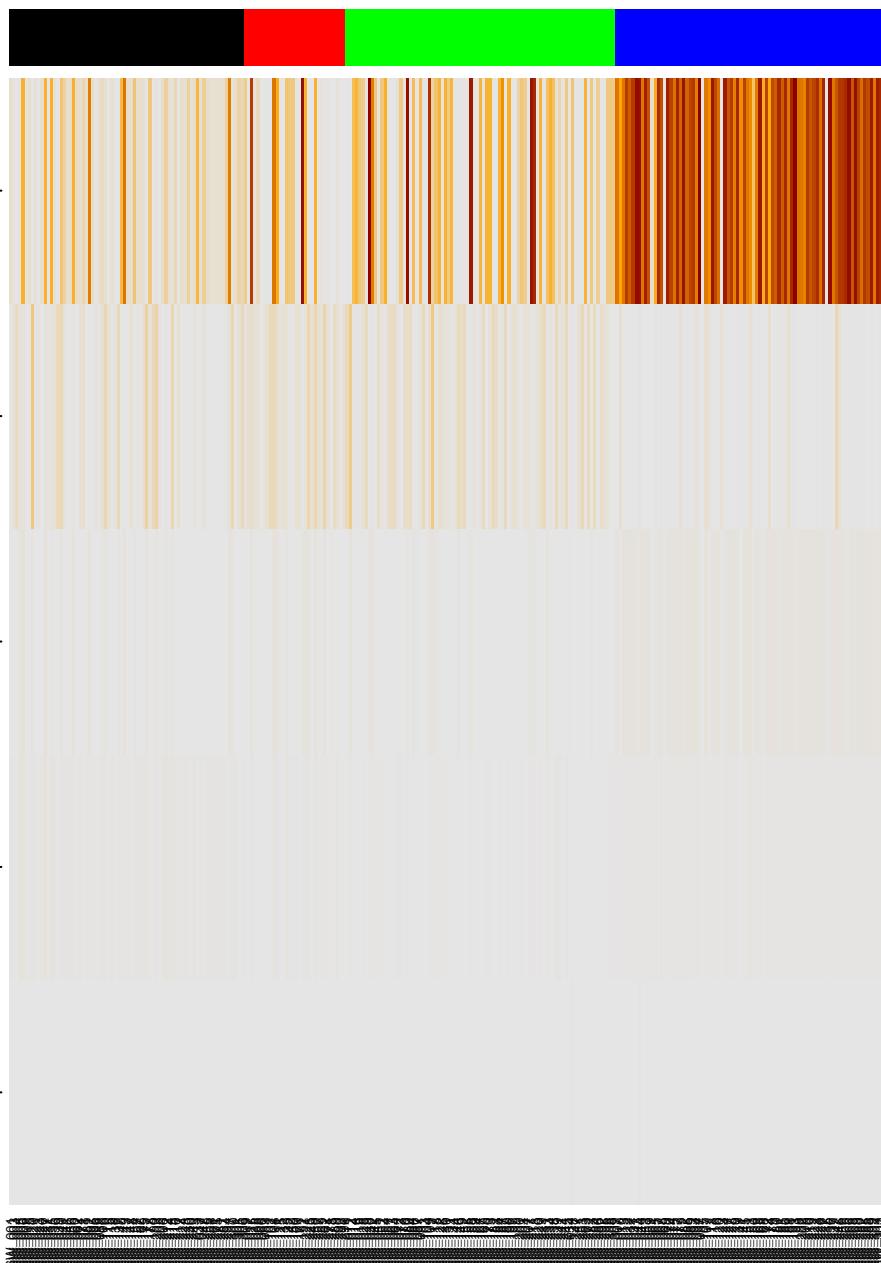


-93

0

$\log(\text{p.value})$

Disease



O GUDJ_psoriasis up

A GUDJ_psoriasis down

A BCHE TNIA_EBM up

O BCHE TNIA_EBM-DM up

A BCHE TNIA_EBM down

-93

0

$\log(p\text{.value})$

Glio

- J mature astrocytes
- L in vivo astrocytes vs. cultured astroglia
- O VERHAAK_Brain
- K Martinez_Glio_hypermeth
- A Christensen_hypermethylated_in_primary_glioblastoma
- I OL vs. MOG-OL
- A willscher_GBM_LTStw_proteomics-G_UP
- L KIM prognostic signature LTS vs. STS
- L KIM deleted & downregulated in LTS
- L Martinez_Glio_hypometh
- L KIM_epithelial-mesenchymal-transition related genes_decreased expression
- L VERHAAK_CL_subtype
- L laffaire_hypermeth_LGG_vs_control
- L Christensen_hypermethylated_in_secondary_glioblastoma
- L Christensen_hypermethylated_in_grade3_astrocytoma
- P Noushmehr_Pron_GCIMP_hypermeth_DN
- L Christensen_hypermethylated_in_ependymoma
- L OPC
- Q willscher_GBM_Verhaak-MES_expression_M_down
- Q willscher_GBM_Verhaak-CL_expression_M_down
- Q willscher_GBM_Verhaak-PNmut_expression_M_up
- J willscher_GBM_Verhaak-MES_expression_H_up
- J willscher_GBM_Verhaak-CL_expression_H_down
- J willscher_GBM_Verhaak-PNwt_expression_H_up
- K willscher_GBM_proteomics_wtOnly_SpotH
- O Down_b
- L Vishal_subnetwork_signature_of_survival_in_GBM
- L Barbus_GBM_STS_vs_LTS
- B WIRTH_PN subtype
- M GIEZELT_GBM_STS_up_VS_LTS
- R VERHAAK_NL subtype
- I GIEZELT_GBM_STS_down_VS_LTS
- E GIEZELT_GBM_LTStw_up_VS_LTStw
- M GIEZELT_GBM_MGMTmethyl_up_VS_nonmethyl
- I OL vs. OPC
- A astrocytes_glio
- E willscher_GBM_Verhaak-MES_expression_D_down
- E willscher_GBM_Verhaak-CL_expression_D_up
- E willscher_GBM_Verhaak-PNwt_expression_D_up
- R willscher_GBM_proteomics_wtOnly_Differencelist
- R willscher_GBM_proteomics_wtOnly_SpotG
- R Stuehler_Proteins_up_in_STS
- F Up
- C willscher_GBM_Verhaak-PNwt_expression_J_up
- L Christensen_hypermethylated_in_grade3_oligoastrocytoma
- L Christensen_hypermethylated_in_grade2_oligoastrocytoma
- L Christensen_hypermethylated_in_grade2_oligodendrogloma
- L Christensen_hypomethylated_in_primary_glioblastoma
- L Christensen_hypomethylated_in_secondary_glioblastoma
- A willscher_GBM_Verhaak-PNmut_expression_G_down
- G Donson-chemokines/cytokines-associated with LTS in HGA
- G Donson-cytotoxic effectors_associated with LTS in HGA
- G Donson-innate immunity_associated with LTS in HGA
- F Donson-immune cell intra_signaling_associated with LTS in HGA
- L GIEZELT_GBM_WT_up_VS_mut
- L Colman_survival_associated
- L cultured astroglia vs. in vivo astrocytes
- K developing astrocytes
- L willscher_GBM_Verhaak-MES_expression_B_up
- L willscher_GBM_Verhaak-CL_expression_B_up
- L willscher_GBM_Verhaak-PNwt_expression_B_down
- K willscher_GBM_Verhaak-PNmut_expression_C_down
- K willscher_GBM_Verhaak-CL_expression_C_up

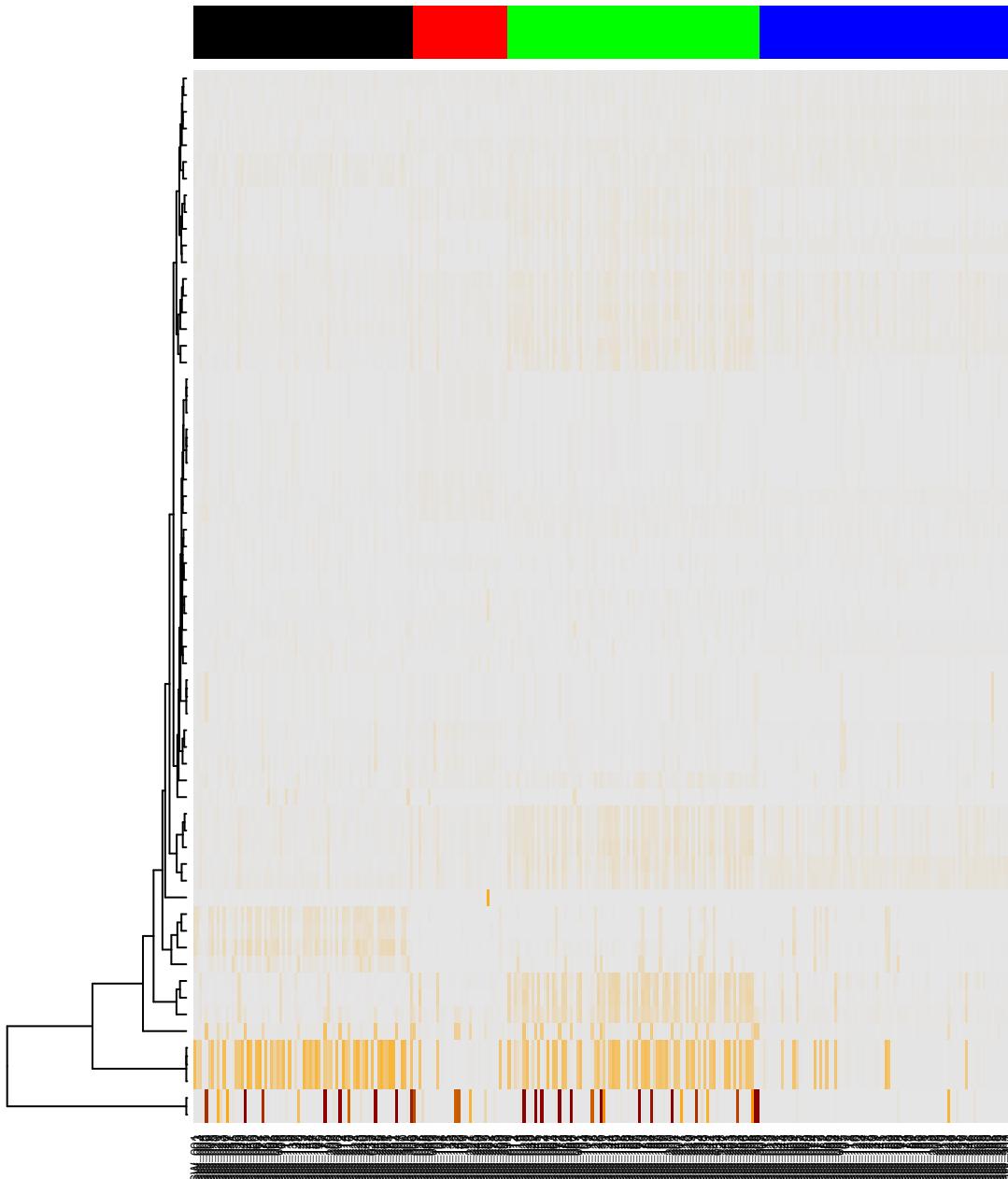
-99

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log(p.value)

Glio

J mature astrocytes
L in vivo astrocytes vs. cultured astroglia
O VERHAAK_Brain
K Martinez_Glio_hypermeth
A Christensen_hypermethylated_in_primary_glioblastoma
I OL vs. MOG- OL
A willscher_GBM_LTswt_proteomics_G_UP
L KIM prognostic signature LTS vs. STS
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L Martinez_Glio_hypometh
L KIM_epithelial-mesenchymal-transition related genes_decreased
L VERHAAK_CL_subtype
L laffaire_hypermeth_LGG_vs_control
L Christensen_hypermethylated_in_secondary_glioblastoma
L Christensen_hypermethylated_in_grade3_astrocytoma
P Noushabe_Pron_GCIMP_hypermeth_DN
L Christensen_hypomethylated_in_ependymoma
L OPC
Q willscher_GBM_Verhaak-MES_expression_M_down
Q willscher_GBM_Verhaak-CL_expression_M_down
Q willscher_GBM_Verhaak-PNmut_expression_M_up
J willscher_GBM_Verhaak-MES_expression_H_up
J willscher_GBM_Verhaak-CL_expression_H_down
J willscher_GBM_Verhaak-PNwt_expression_H_up
K willscher_GBM_proteomics_wtOnly_SpotH
O Down_b
L Vishal_subnetwork signature of survival in GBM
L Barbus_GBM_STS_vs._LTS
B WIRTH_PN subtype
M GIEZELT_GBM_STS_up_VS_LTS
R VERHAAK_NL subtype
I GIEZELT_GBM_STS_down_VS_LTS
E GIEZELT_GBM_STSwt_up_VS_LTswt
M GIEZELT_GBM_MGMTmethyl_up_VS_nonmethyl
I OL vs. OPC
A astrocytes_glio
E willscher_GBM_Verhaak-MES_expression_D_down
E willscher_GBM_Verhaak-CL_expression_D_up
E willscher_GBM_Verhaak-PNwt_expression_D_up
R willscher_GBM_proteomics_wtOnly_Differencelist_
R willscher_GBM_proteomics_wtOnly_SpotG
R Stuehler_Proteins_up_in_STS
F Up
C willscher_GBM_Verhaak-PNwt_expression_J_up
L Christensen_hypermethylated_in_grade3_oligoastrocytoma
L Christensen_hypermethylated_in_grade2_oligoastrocytoma
L Christensen_hypermethylated_in_grade2_oligodendrogioma
L Christensen_hypomethylated_in_primary_glioblastoma
L Christensen_hypomethylated_in_secondary_glioblastoma
A willscher_GBM_Verhaak-PNmut_expression_G_down
G Donson_chemokines/cytokines_associated with LTS in HGA
G Donson_cytotoxic_effectors_associated with LTS in HGA
G Donson_innate immunity_associated with LTS in HGA
F Donson immune cell intra signaling_associated with LTS in HGA
L GIEZELT_GBM_WT_up_VS_mut
L Colman_survival_associated
L cultured astroglia vs. in vivo astrocytes
K developing astrocytes
L willscher_GBM_Verhaak-MES_expression_B_up
L willscher_GBM_Verhaak-CL_expression_B_up
L willscher_GBM_Verhaak-PNwt_expression_B_down
K willscher_GBM_Verhaak-PNmut_expression_C_down
K willscher_GBM_Verhaak-CL_expression_C_up

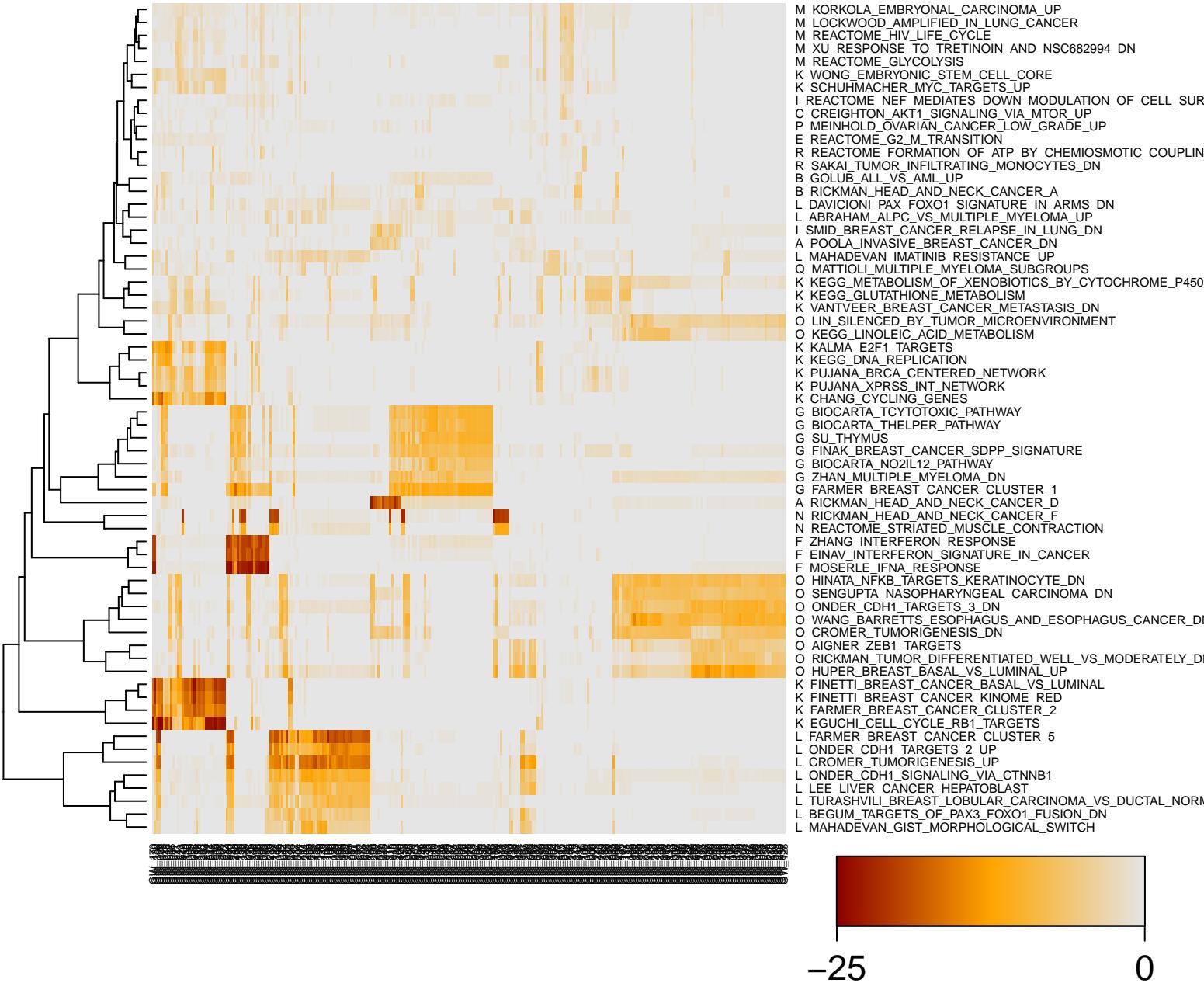


-99

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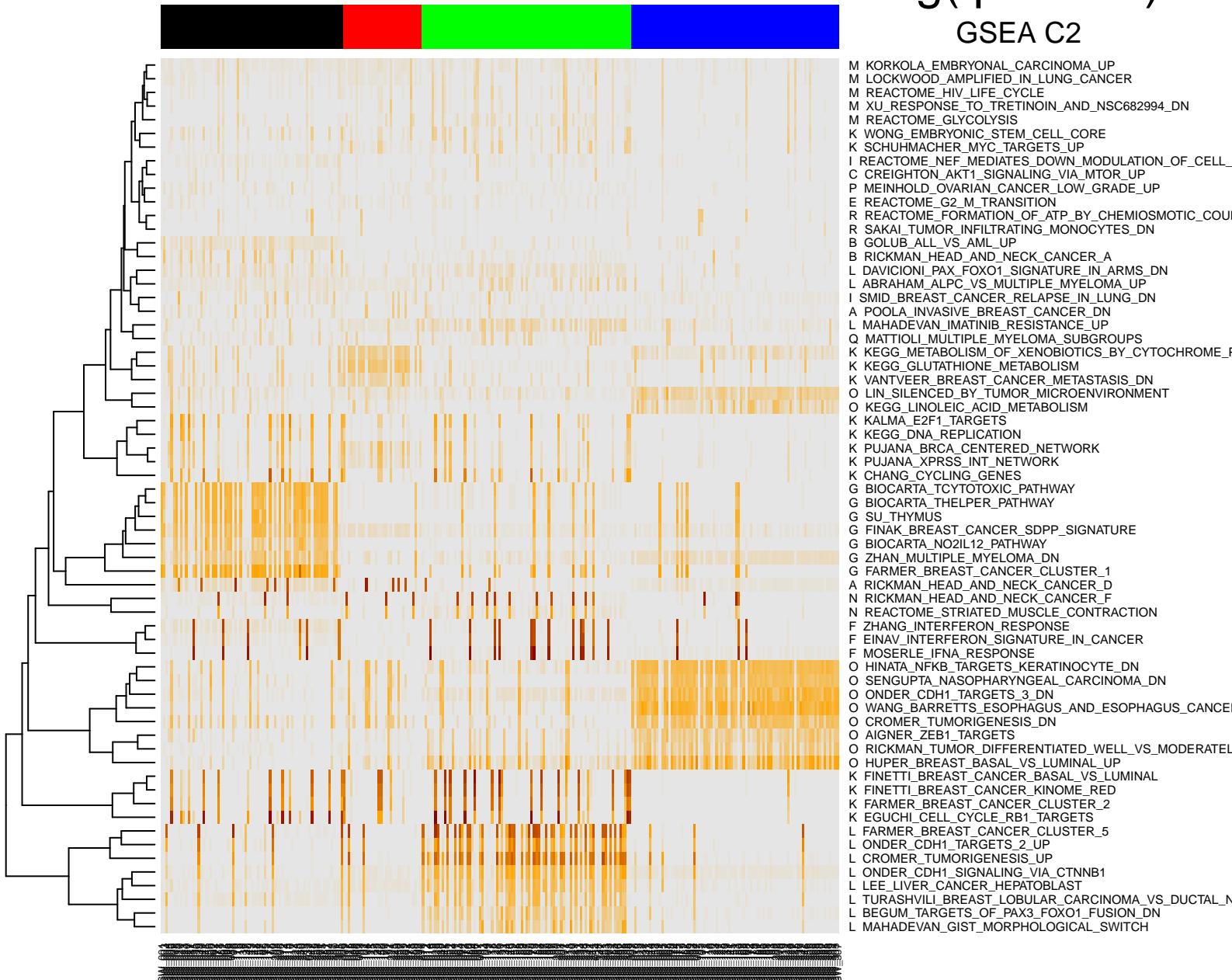
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GSEA C2



log(p.value)

GSEA C2



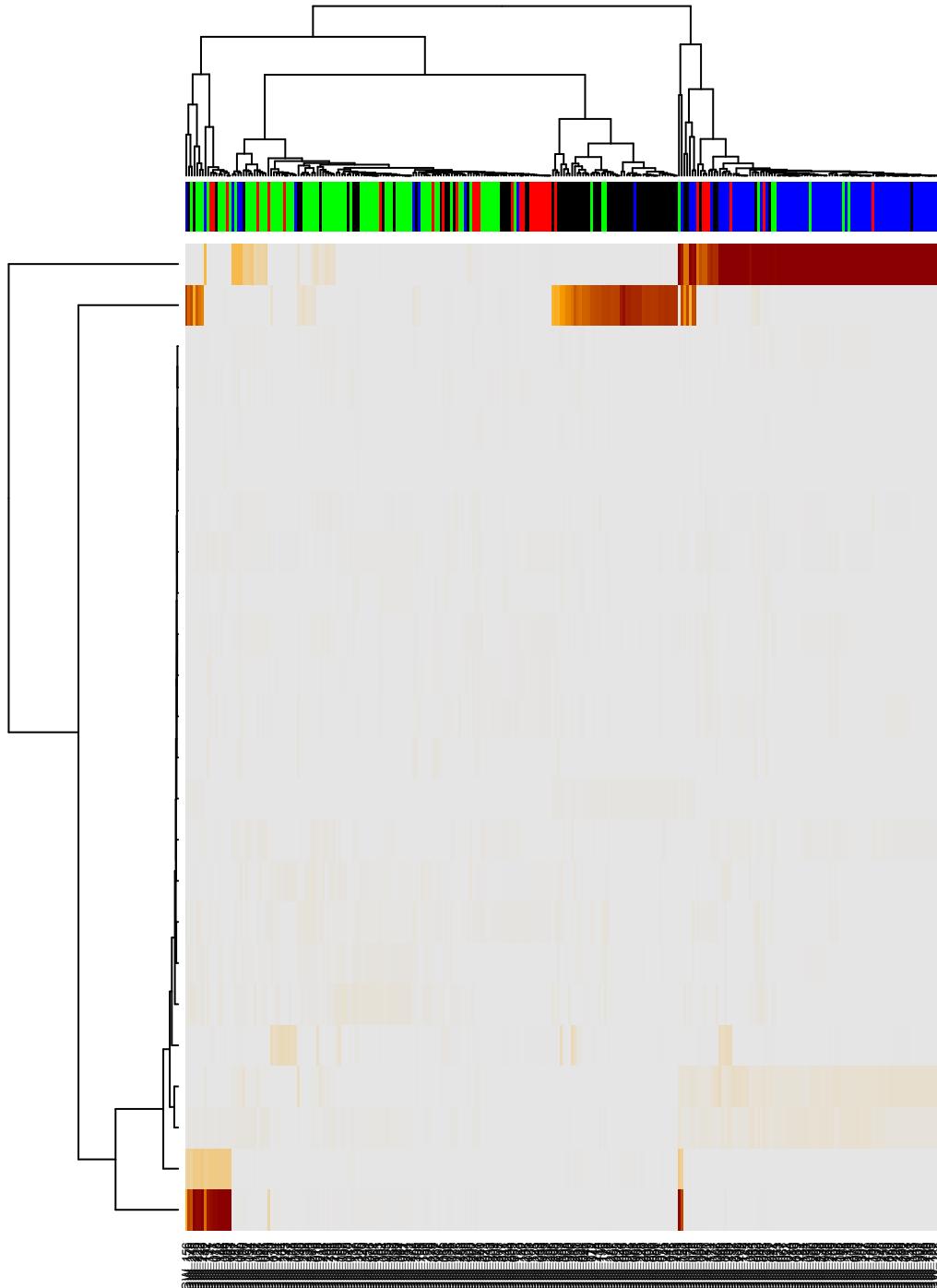
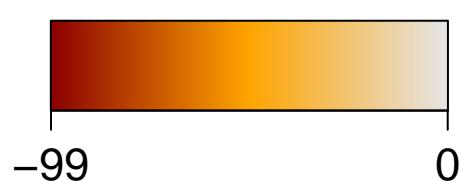
-25

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$\log(p\text{.value})$

H.Tiss

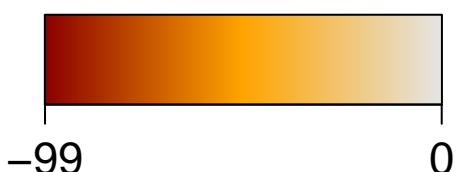
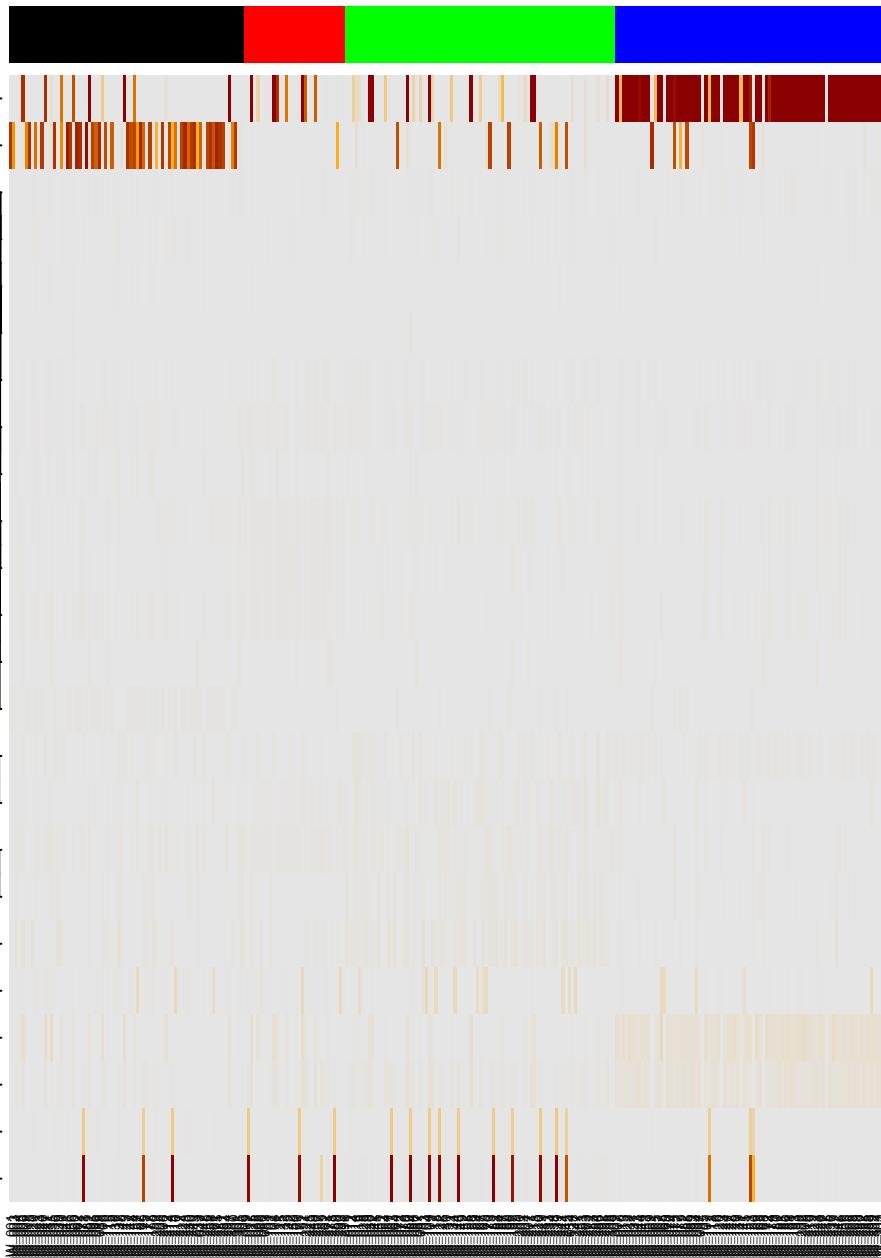
- O WIRTH_Mucosa
- G WIRTH_Immune system
- I WIRTH_Pancreas
- I WIRTH_Globus pallidus
- P WIRTH_Homeostasis
- A WIRTH_Pituitary gland
- P WIRTH_Liver
- A WIRTH_Nervous System
- P WIRTH_Thyroid gland
- I WIRTH_Thalamus
- K WIRTH_Telencephalon
- K WIRTH_Cerebellum
- M WIRTH_B-cells
- G WIRTH_Bone marrow
- O WIRTH_Thymus
- L WIRTH_Placenta
- F WIRTH_Lymphocytes
- L WIRTH_Cortex cerebri
- I WIRTH_Sec. lymphoid organs
- Q WIRTH_Testis
- O WIRTH_Tonsil
- O WIRTH_Prim. lymphoid organs
- N WIRTH_Hippocampus
- N WIRTH_Muscle



$\log(\text{p.value})$

H.Tiss

- O WIRTH_Mucosa
- G WIRTH_Immune system
- I WIRTH_Pancreas
- I WIRTH_Globus pallidus
- P WIRTH_Homeostasis
- A WIRTH_Pituitary gland
- P WIRTH_Liver
- A WIRTH_Nervous System
- P WIRTH_Thyroid gland
- I WIRTH_Thalamus
- K WIRTH_Telencephalon
- K WIRTH_Cerebellum
- M WIRTH_B-cells
- G WIRTH_Bone marrow
- O WIRTH_Thymus
- L WIRTH_Placenta
- F WIRTH_Lymphocytes
- L WIRTH_Cortex cerebri
- I WIRTH_Sec. lymphoid organs
- Q WIRTH_Testis
- O WIRTH_Tonsil
- O WIRTH_Prim. lymphoid organs
- N WIRTH_Hippocampus
- N WIRTH_Muscle



$\log(p\text{.value})$

Lymphoma

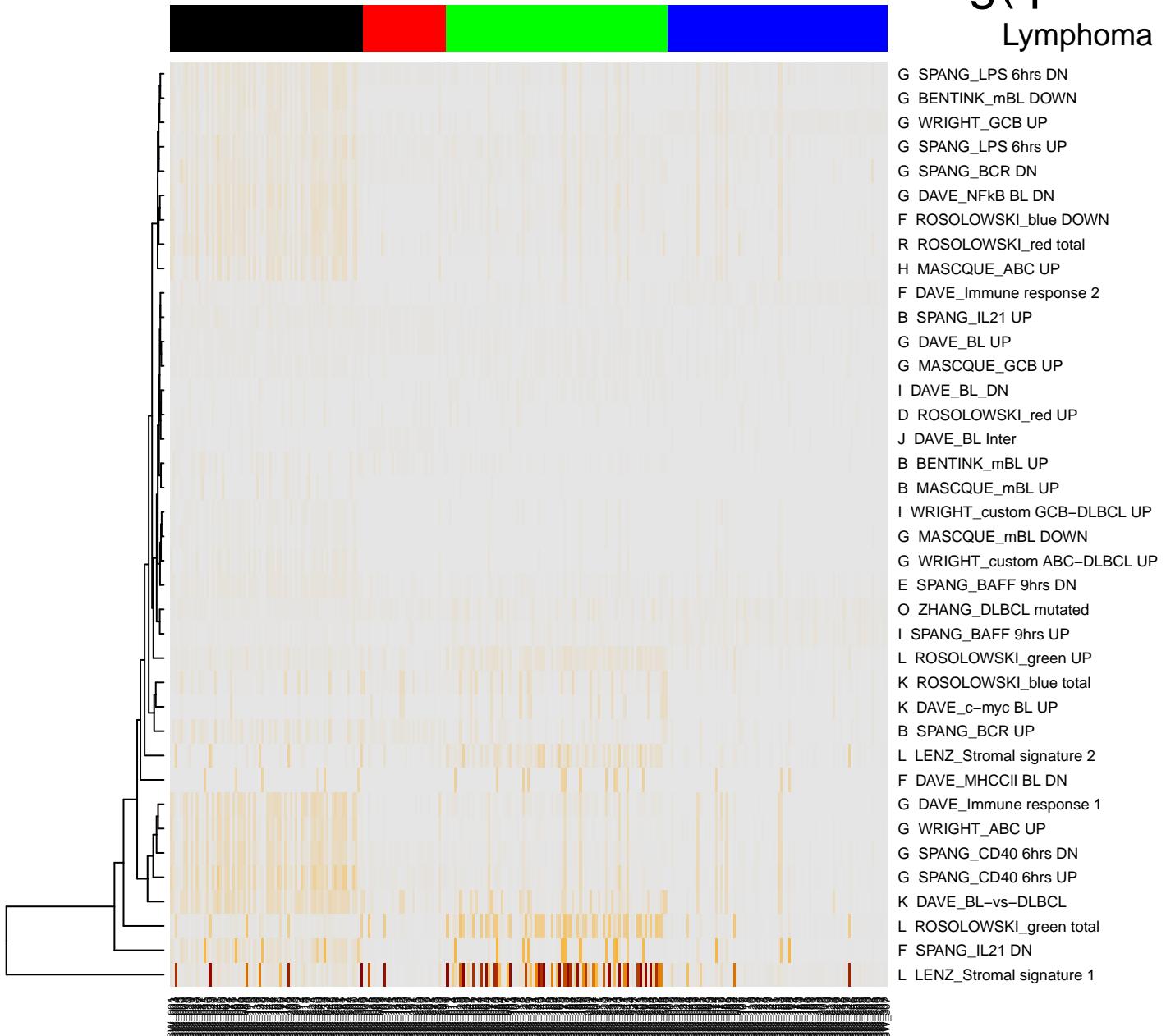
- G SPANG_LPS 6hrs DN
- G BENTINK_mBL DOWN
- G WRIGHT_GCB UP
- G SPANG_LPS 6hrs UP
- G SPANG_BCR DN
- G DAVE_NFKB BL DN
- F ROSOLOWSKI_blue DOWN
- R ROSOLOWSKI_red total
- H MASCQUE_ABC UP
- F DAVE_Immune response 2
- B SPANG_IL21 UP
- G DAVE_BL UP
- G MASCQUE_GCB UP
- I DAVE_BL_DN
- D ROSOLOWSKI_red UP
- J DAVE_BL Inter
- B BENTINK_mBL UP
- B MASCQUE_mBL UP
- I WRIGHT_custom GCB-DLBCL UP
- G MASCQUE_mBL DOWN
- G WRIGHT_custom ABC-DLBCL UP
- E SPANG_BAFF 9hrs DN
- O ZHANG_DLBC mutated
- I SPANG_BAFF 9hrs UP
- L ROSOLOWSKI_green UP
- K ROSOLOWSKI_blue total
- K DAVE_c-myc BL UP
- B SPANG_BCR UP
- L LENZ_Stromal signature 2
- F DAVE_MHCCII BL DN
- G DAVE_Immune response 1
- G WRIGHT_ABC UP
- G SPANG_CD40 6hrs DN
- G SPANG_CD40 6hrs UP
- K DAVE_BL-vs-DLBCL
- L ROSOLOWSKI_green total
- F SPANG_IL21 DN
- L LENZ_Stromal signature 1

-82

0

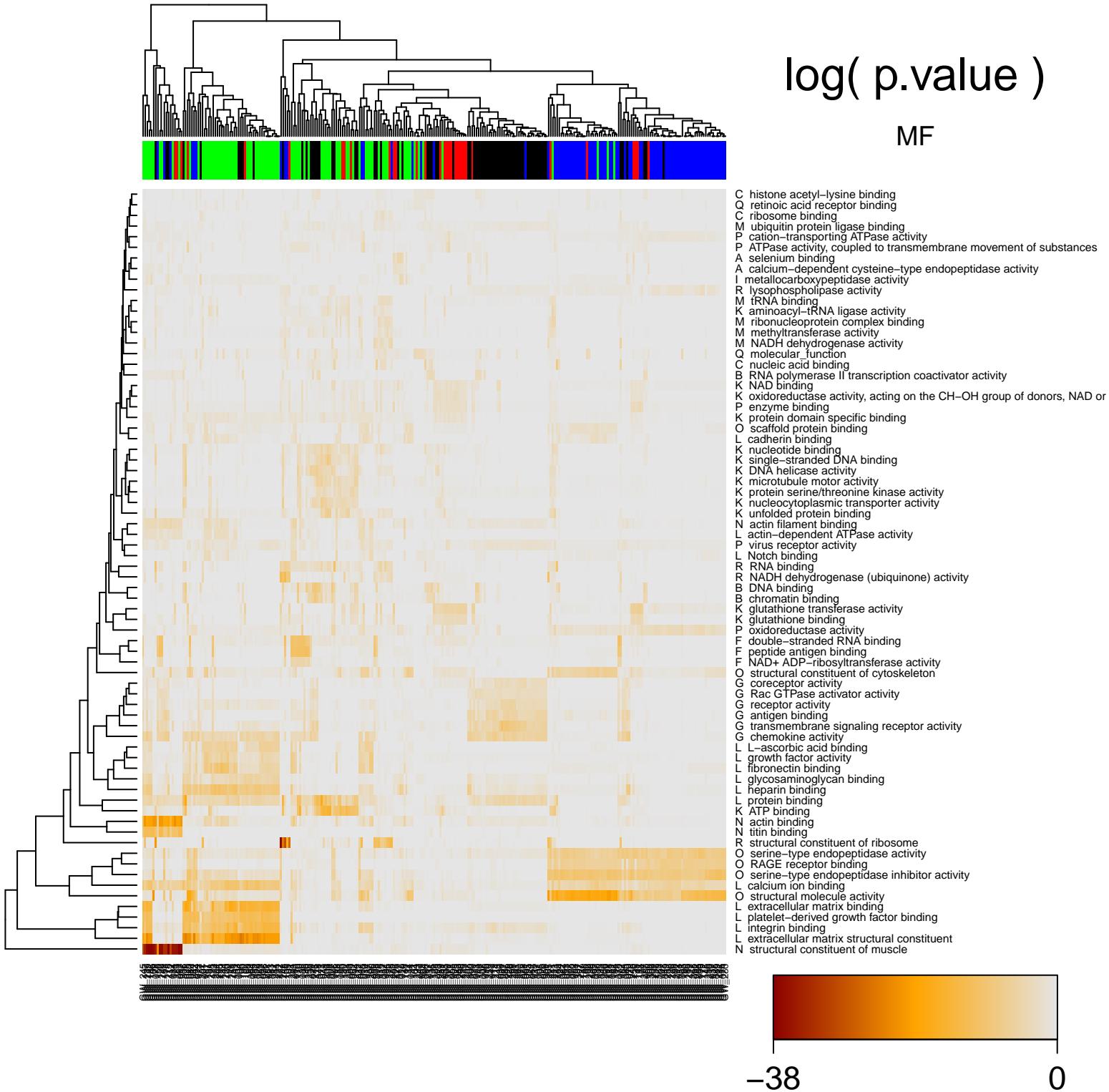
log(p.value)

Lymphoma



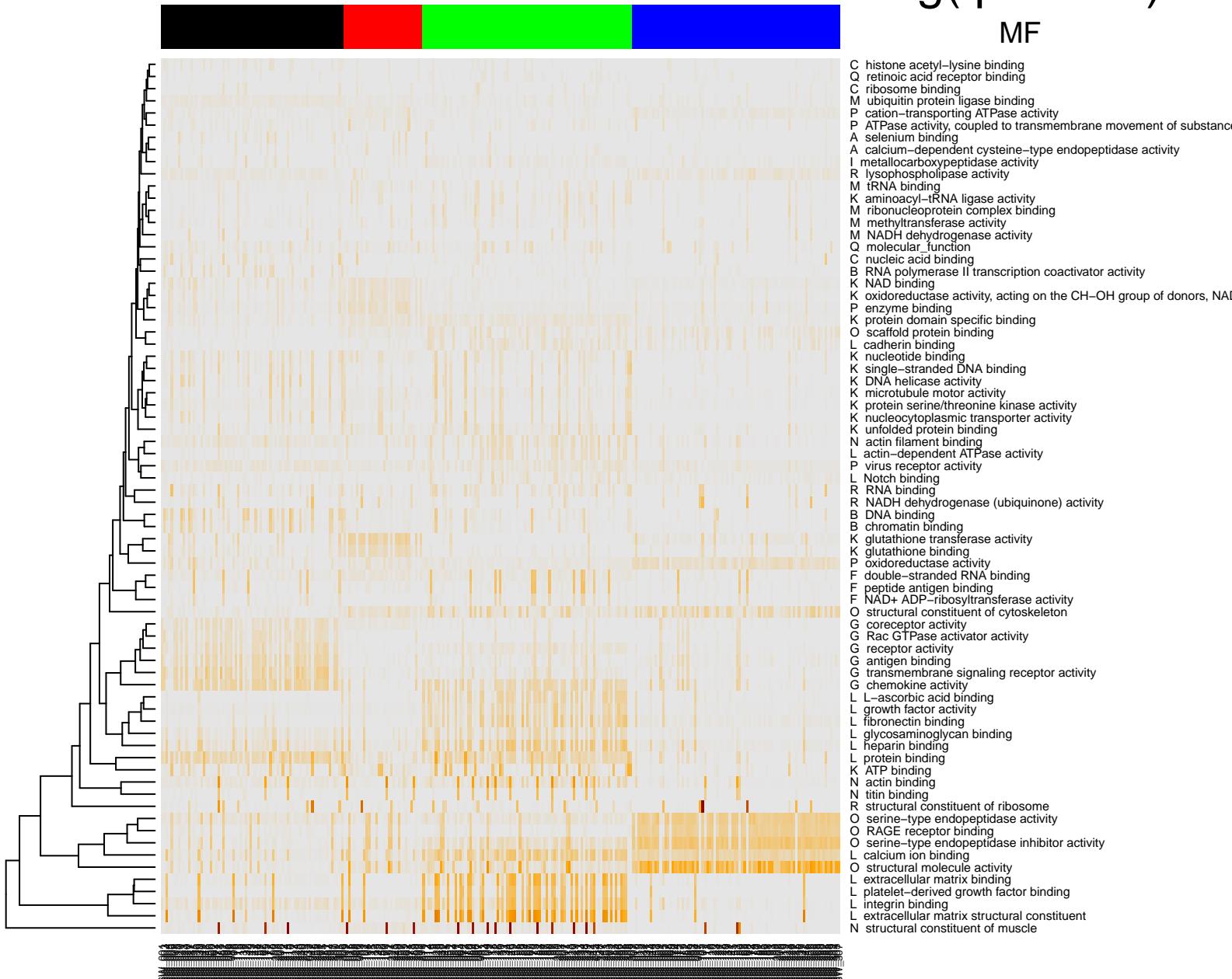
-82

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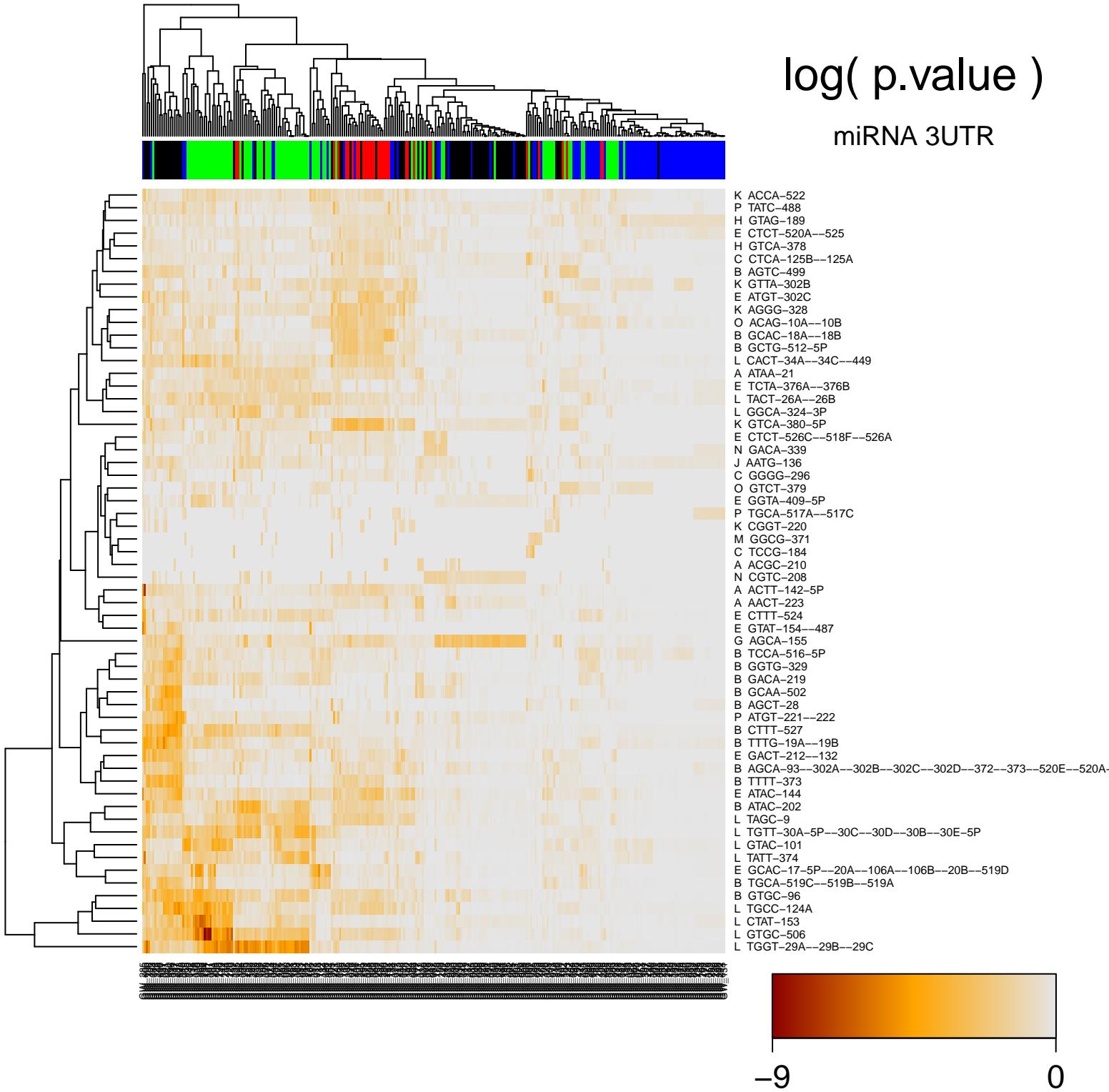
log(p.value)

MF



-38

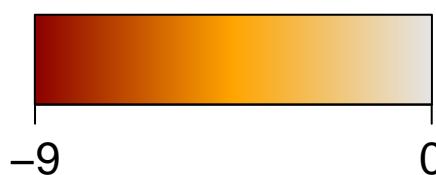
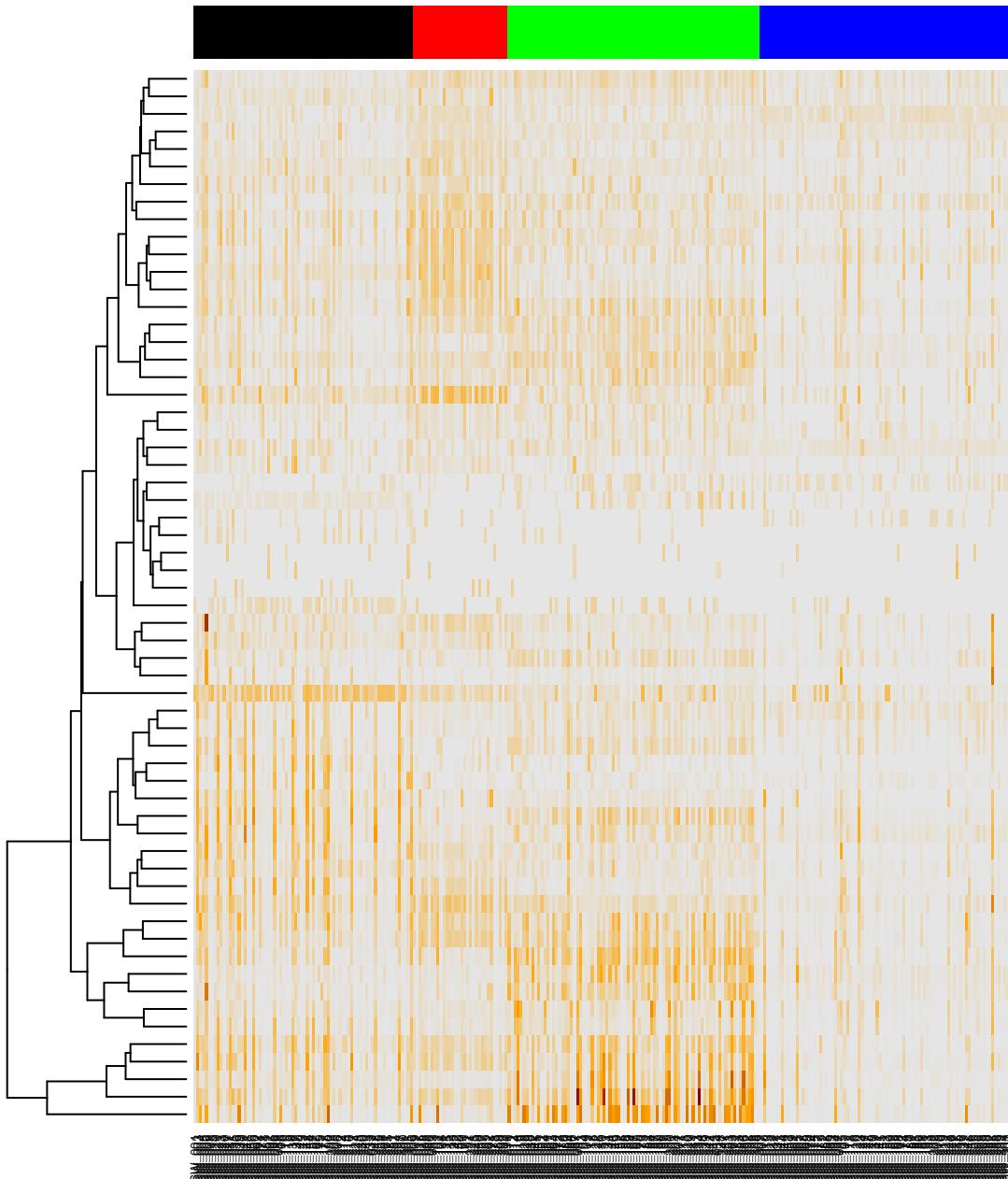
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$\log(p\text{.value})$

miRNA 3UTR

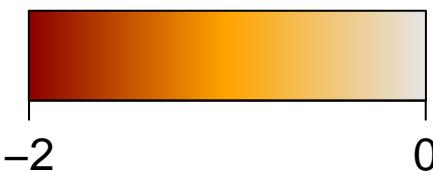
	K ACCA-522	P TATC-488	H GTAG-189	E CTCT-520A--525	H GTCA-378	C CTCA-125B--125A	B AGTC-499	K GTTA-302B	E ATGT-302C	K AGGG-328	O ACAG-10A--10B	B GCAC-18A--18B	B GCTG-512-5P	L CACT-34A--34C--449	A ATAA-21	E TCTA-376A--376B	L TACT-26A--26B	L GGCA-324-3P	K GTCA-380-5P	E CTCT-526C--518F--526A	N GACA-339	J AATG-136	C GGGG-296	O GTCT-379	E GGTA-409-5P	P TGCA-517A--517C	K CGGT-220	M GGCG-371	C TCCG-184	A ACGC-210	N CGTC-208	A ACTT-142-5P	A AACT-223	E CTTT-524	E GTAT-154--487	G AGCA-155	B TCCA-516-5P	B GGTG-329	B GACA-219	B GCAA-502	B AGCT-28	P ATGT-221--222	B CTTT-527	B TTG-19A--19B	E GACT-212--132	B AGCA-93--302A--302B--302C--302D--372--373--520E--5-	B TTTT-373	E ATAC-144	B ATAC-202	L TAGC-9	L TGTT-30A-5P--30C--30D--30B--30E-5P	L GTAC-101	L TATT-374	E GCAC-17-5P--20A--106A--106B--20B--519D	B TGCA-519C--519B--519A	B GTGC-96	L TGCC-124A	L CTAT-153	L GTGC-506	L TGGT-29A--29B--29C
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$\log(p\text{.value})$

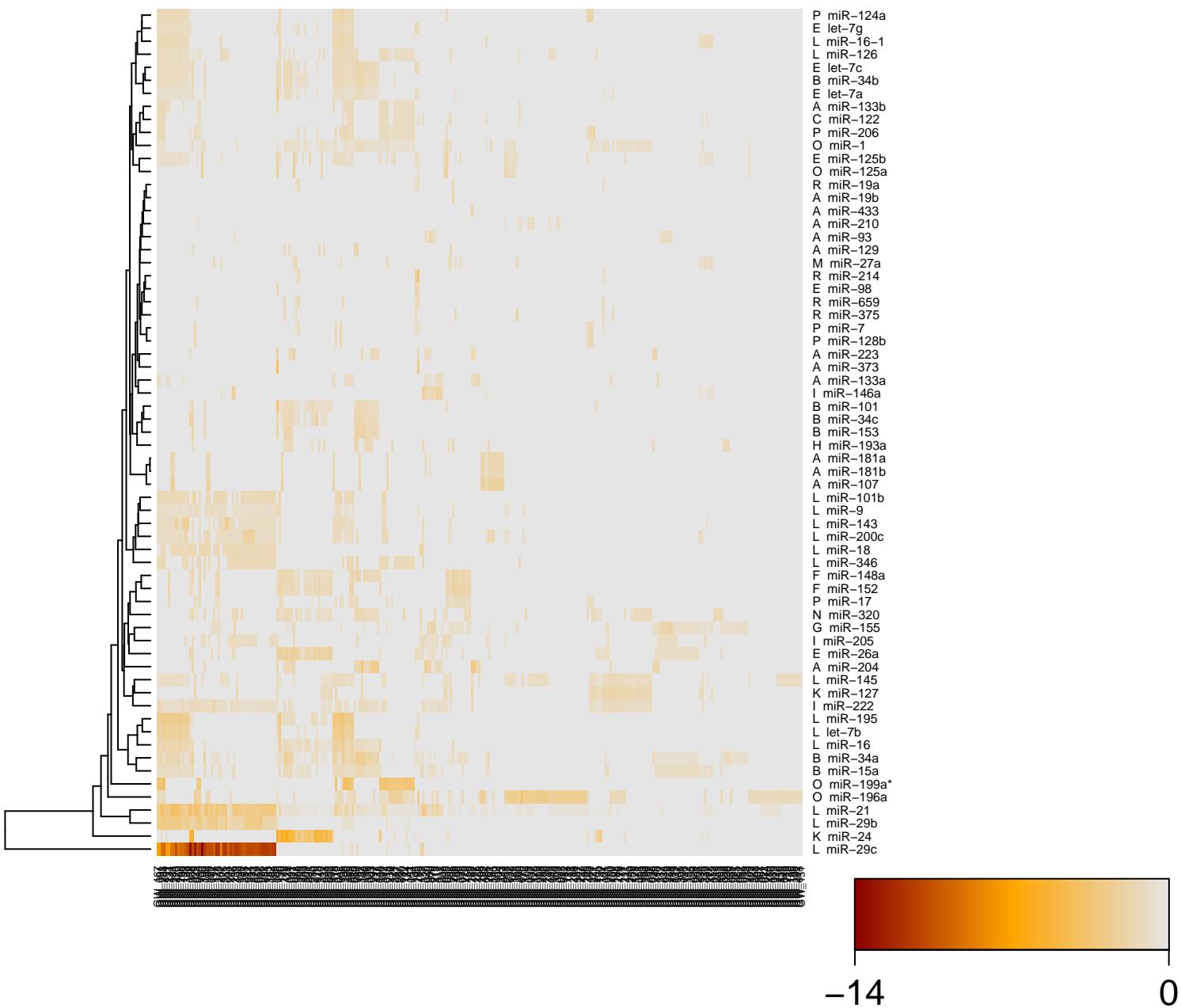
miRNA Disease

- A Squamous cell carcinoma, head and neck
- A Pancreatic cancer
- A Hematological
- A Prostate cancer
- A Cancer
- A Breast cancer
- A Melanoma and neural system tumor syndrome
- A Leukemia
- A Ovarian cancer
- A Cardiomyopathy, dilated
- A Hepatocellular carcinoma
- A Muscular
- A Glioblastoma multiforme, somatic
- A Colorectal cancer
- A Myopathy, nemaline, 3
- A Multiple myeloma
- A Neuroblastoma
- A Bladder cancer
- A Alzheimer disease, susceptibility to
- A Esophageal cancer
- A Gastric cancer
- A Gastrointestinal
- A Cardiomyopathy, idiopathic dilated
- A Polycythemia vera
- A Thyroid carcinoma, papillary
- A Thyroid carcinoma, follicular
- A Gastroesophageal reflux
- A Duchenne muscular dystrophy
- A Muscular dystrophy
- A Miyoshi myopathy
- A Hodgkin lymphoma
- A Non-Hodgkin lymphoma, somatic
- A Stroke, susceptibility to
- A Lung cancer
- A Parkinson disease
- A Myelofibrosis, idiopathic
- A Cervical cancer, somatic
- A Pigmented adrenocortical disease, primary isolated
- A Adenomas, multiple colorectal
- A Pituitary adenoma
- A Schizophrenia, susceptibility to
- A Medulloblastoma
- A Myocardial infarction, susceptibility to
- A Cardiovascular
- A Systemic lupus erythematosus, susceptibility
- A Thrombocytopenic purpura, autoimmune
- A Supravalvar aortic stenosis
- A Psoriasis, susceptibility to
- A Dermatitis, atopic
- A Autism, susceptibility to
- A Immunological
- A Multiple sclerosis, susceptibility to
- A Systemic lupus erythematosus (SLE)
- A Melanoma, cutaneous malignant, 2



$\log(p\text{.value})$

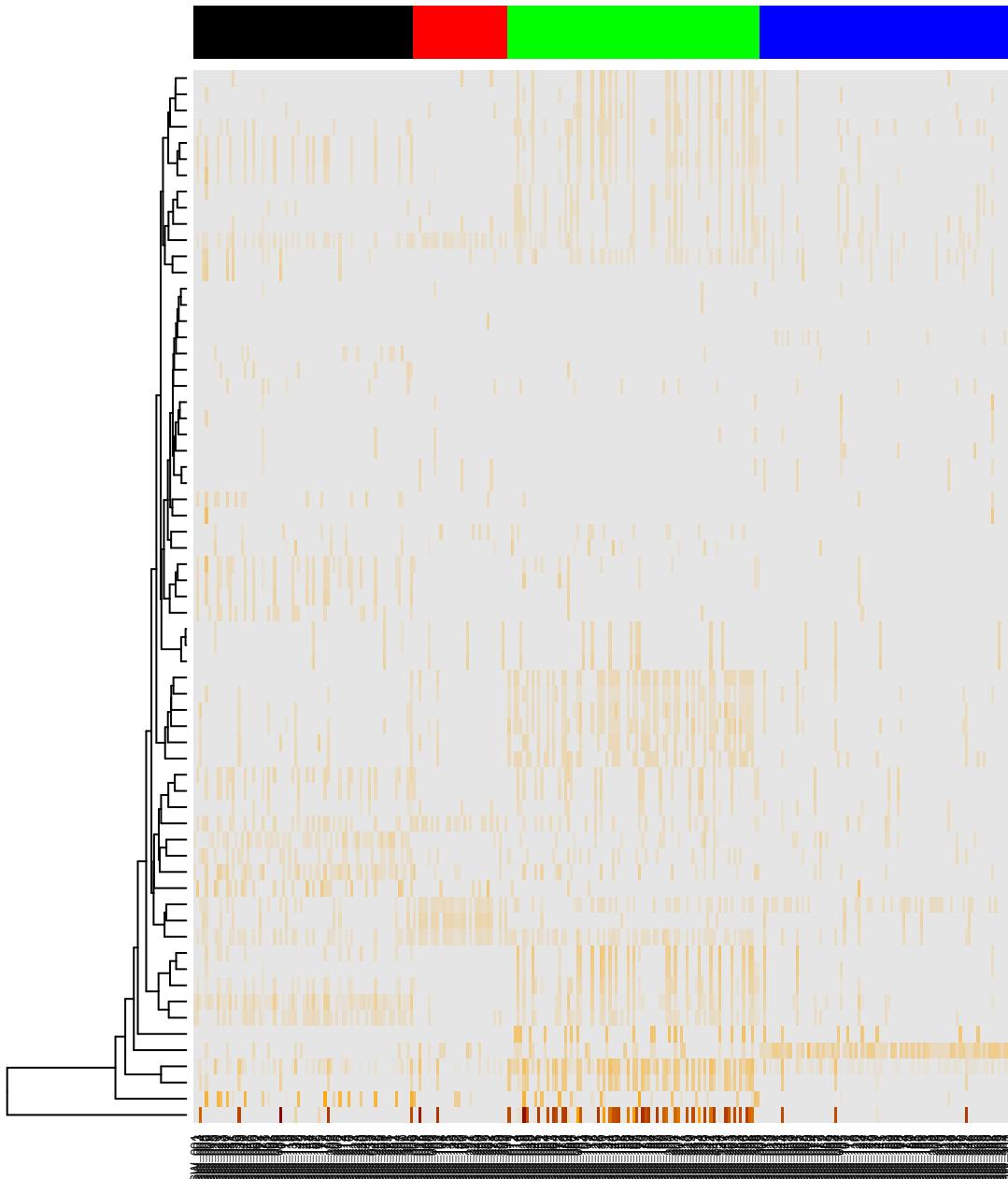
miRNA target



log(p.value)

miRNA target

P miR-124a
E let-7g
L miR-16-1
L miR-126
E let-7c
B miR-34b
E let-7a
A miR-133b
C miR-122
P miR-206
O miR-1
E miR-125b
O miR-125a
R miR-19a
A miR-19b
A miR-433
A miR-210
A miR-93
A miR-129
M miR-27a
R miR-214
E miR-98
R miR-659
R miR-375
P miR-7
P miR-128b
A miR-223
A miR-373
A miR-133a
I miR-146a
B miR-101
B miR-34c
B miR-153
H miR-193a
A miR-181a
A miR-181b
A miR-107
L miR-101b
L miR-9
L miR-143
L miR-200c
L miR-18
L miR-346
F miR-148a
F miR-152
P miR-17
N miR-320
G miR-155
I miR-205
E miR-26a
A miR-204
L miR-145
K miR-127
I miR-222
L miR-195
L let-7b
L miR-16
B miR-34a
B miR-15a
O miR-199a*
O miR-196a
L miR-21
L miR-29b
K miR-24
L miR-29c



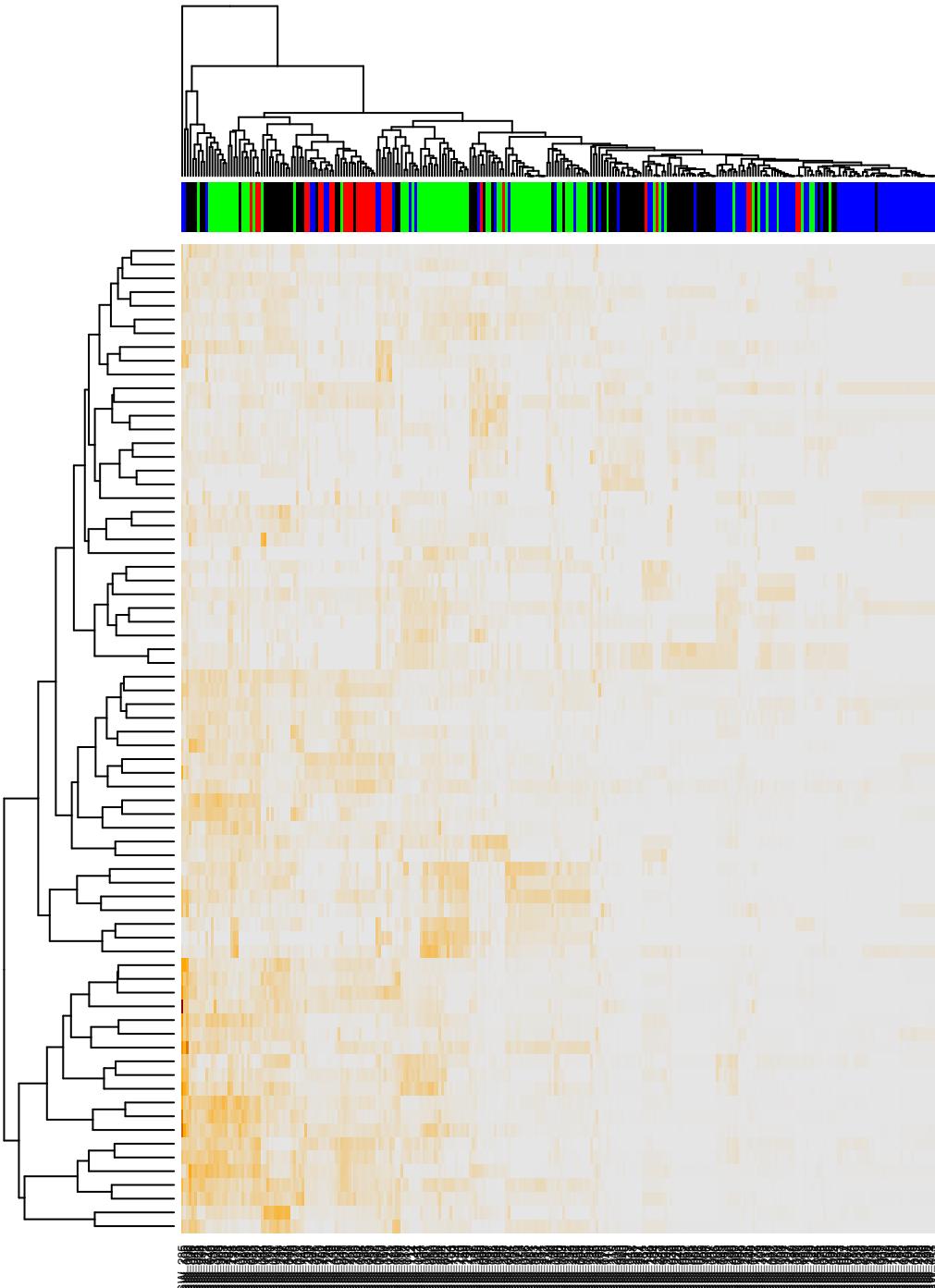
-14

0

$\log(\text{p.value})$

miRNA target starBase

- K hsa-miR-125a-3p
- E hsa-miR-519e*
- E hsa-miR-504
- G hsa-miR-628-5p
- E hsa-miR-491-3p
- C hsa-miR-571
- C hsa-miR-296-5p
- P hsa-miR-509-3p
- E hsa-miR-302b*
- P hsa-miR-127-3p
- A hsa-miR-564
- M hsa-miR-874
- M hsa-miR-939
- C hsa-miR-125a-5p
- E hsa-miR-517*
- E hsa-miR-1226
- I hsa-miR-1228
- I hsa-miR-639
- O hsa-miR-1298
- K hsa-miR-1305
- B hsa-miR-524-3p
- C hsa-miR-1237
- N hsa-miR-566
- O hsa-miR-484
- J hsa-miR-933
- B hsa-miR-450a
- O hsa-miR-1290
- J hsa-miR-370
- C hsa-miR-602
- G hsa-miR-551a
- E hsa-miR-551b
- K hsa-miR-520a-5p
- E hsa-miR-520f
- R hsa-miR-628-3p
- K hsa-miR-518d-3p
- K hsa-miR-345
- K hsa-miR-625
- K hsa-miR-518b
- K hsa-miR-641
- K hsa-miR-506
- K hsa-miR-496
- K hsa-miR-210
- K hsa-miR-297
- M hsa-miR-378
- M hsa-miR-593
- L hsa-miR-1224-3p
- L hsa-miR-485-3p
- L hsa-let-7f
- L hsa-miR-1259
- L hsa-miR-483-3p
- L hsa-miR-1249
- L hsa-miR-220c
- E hsa-miR-301b
- R hsa-miR-548m
- P hsa-miR-633
- R hsa-miR-1244
- hsa-miR-548l
- E hsa-miR-382
- hsa-let-7b
- B hsa-miR-105
- hsa-miR-16
- E hsa-miR-20a
- K hsa-miR-186
- K hsa-miR-548d-5p
- K hsa-miR-590-3p
- K hsa-miR-888
- K hsa-miR-592-5p
- K hsa-miR-28-5p
- E hsa-miR-548c-3p
- K hsa-miR-181b
- B hsa-miR-188-5p
- B hsa-miR-380

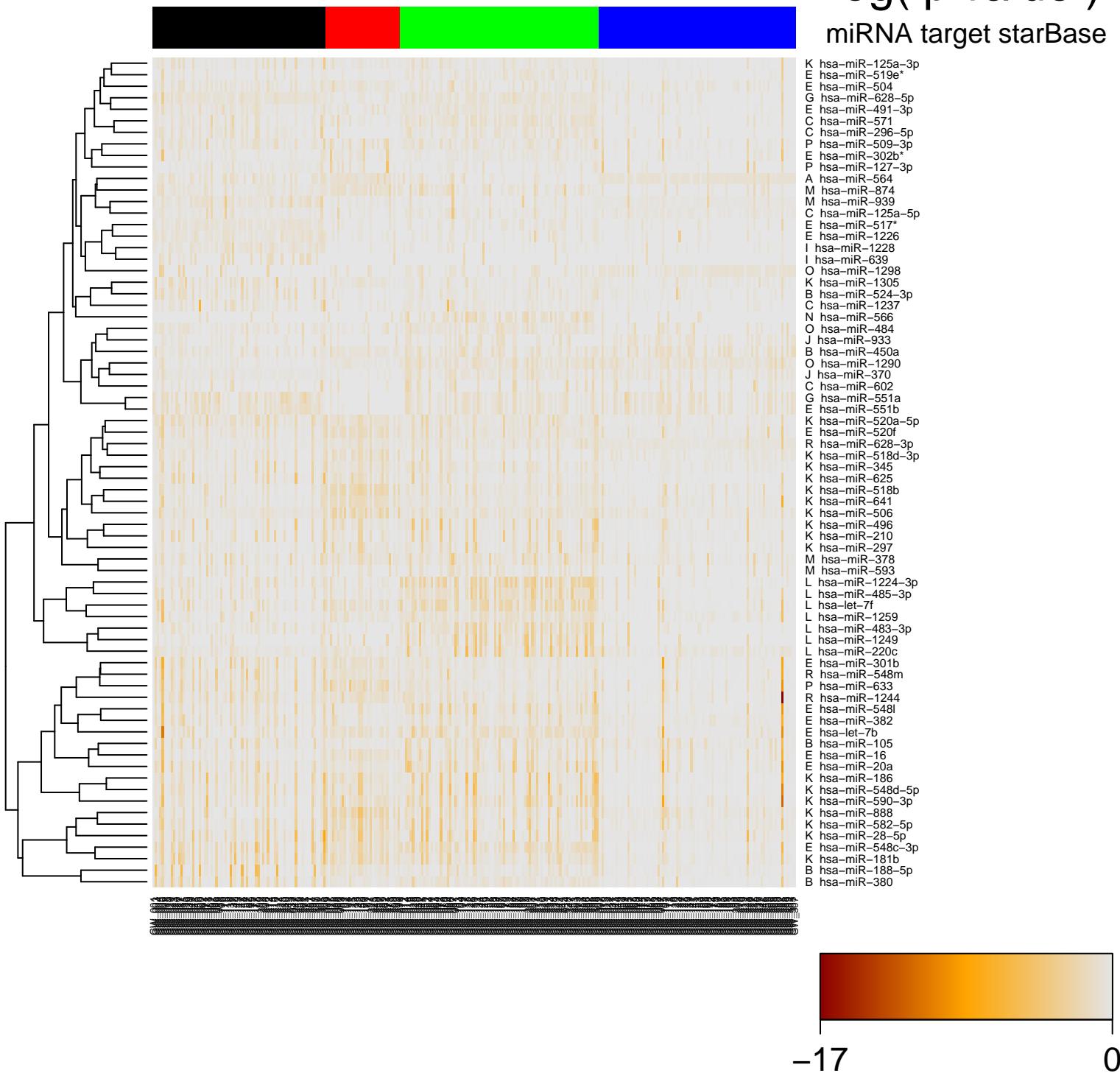


-17

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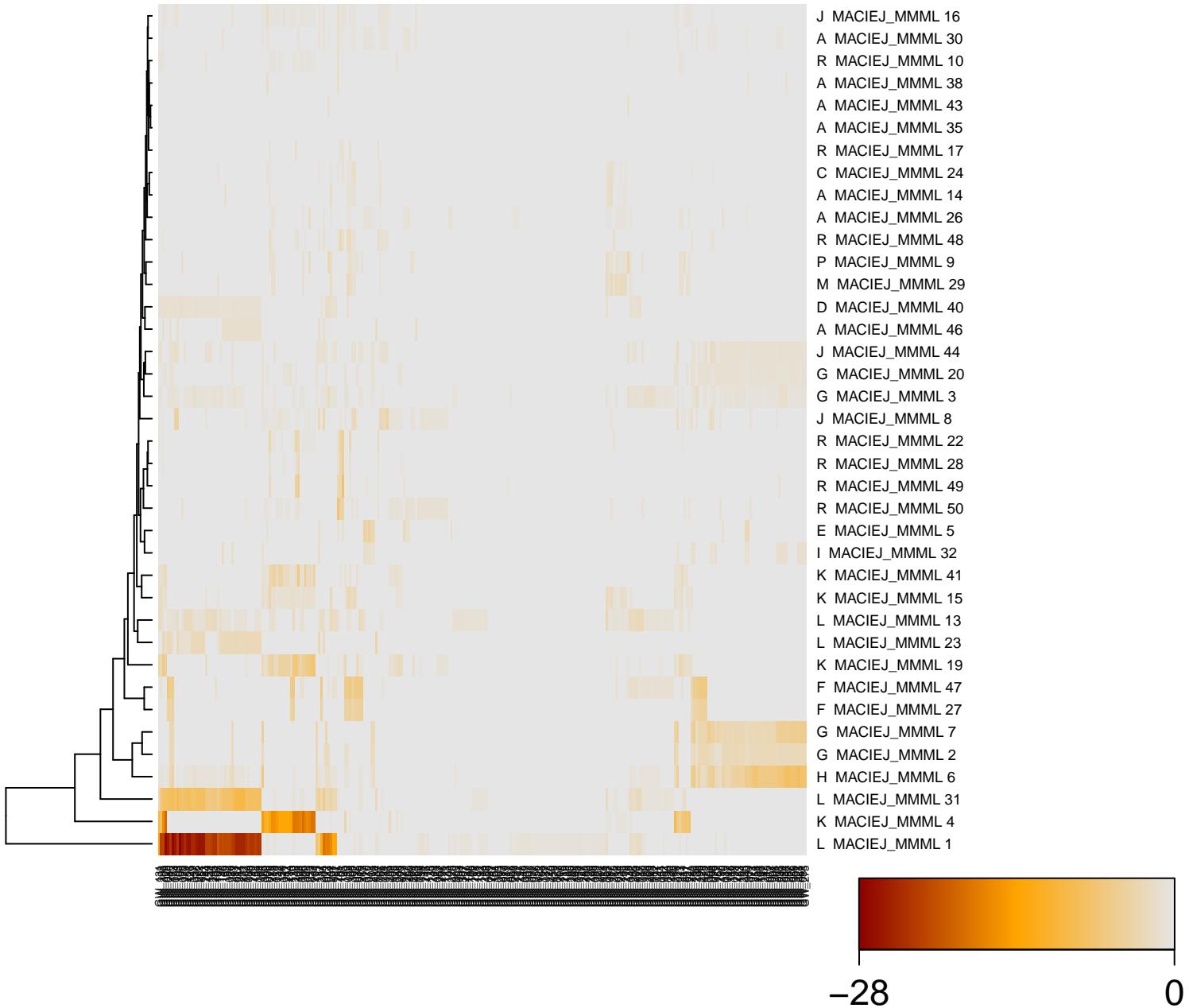
$\log(\text{p.value})$

miRNA target starBase



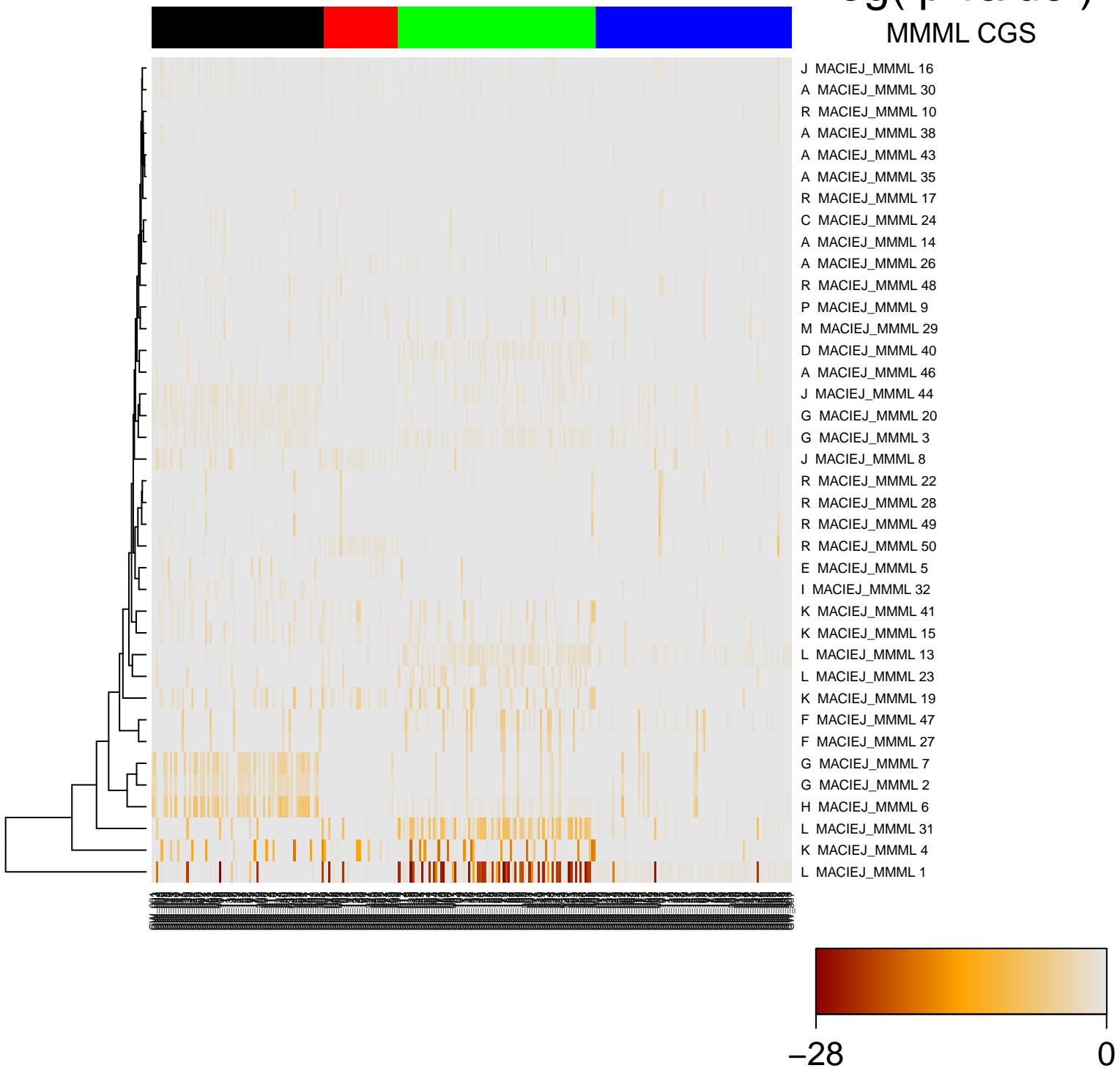
$\log(p\text{.value})$

MMML CGS



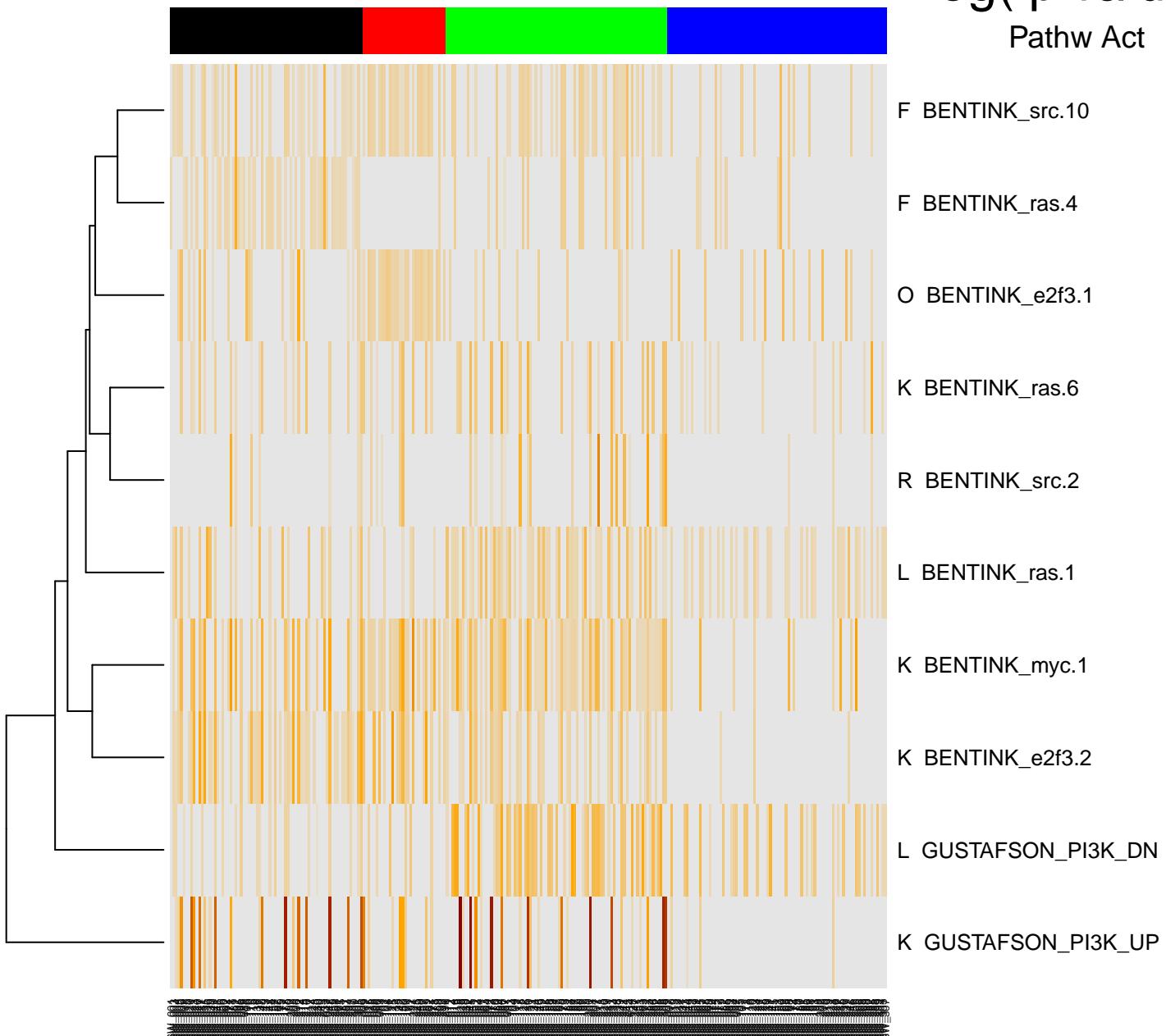
log(p.value)

MMML CGS



$\log(p\text{.value})$

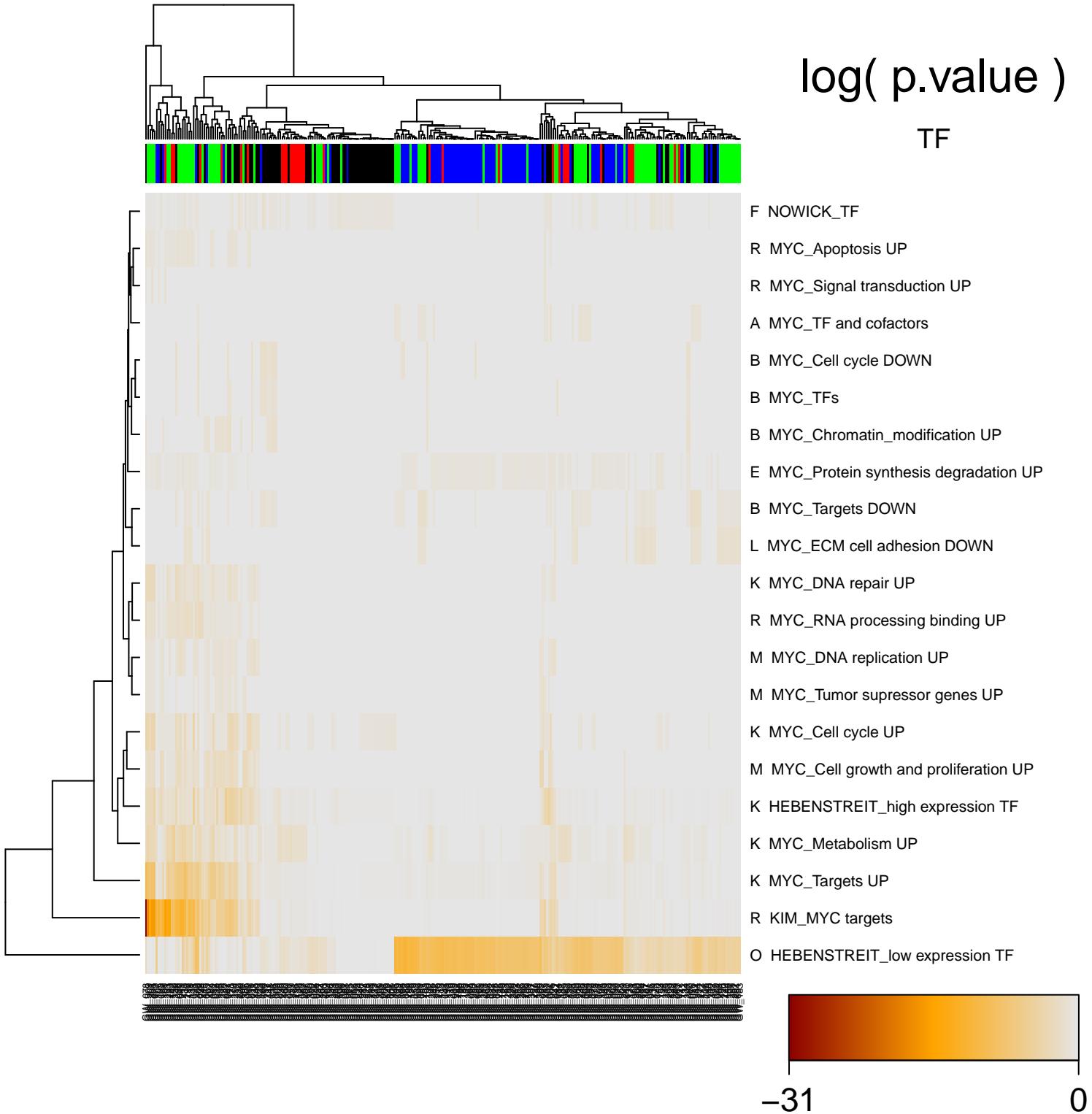
Pathw Act



-6

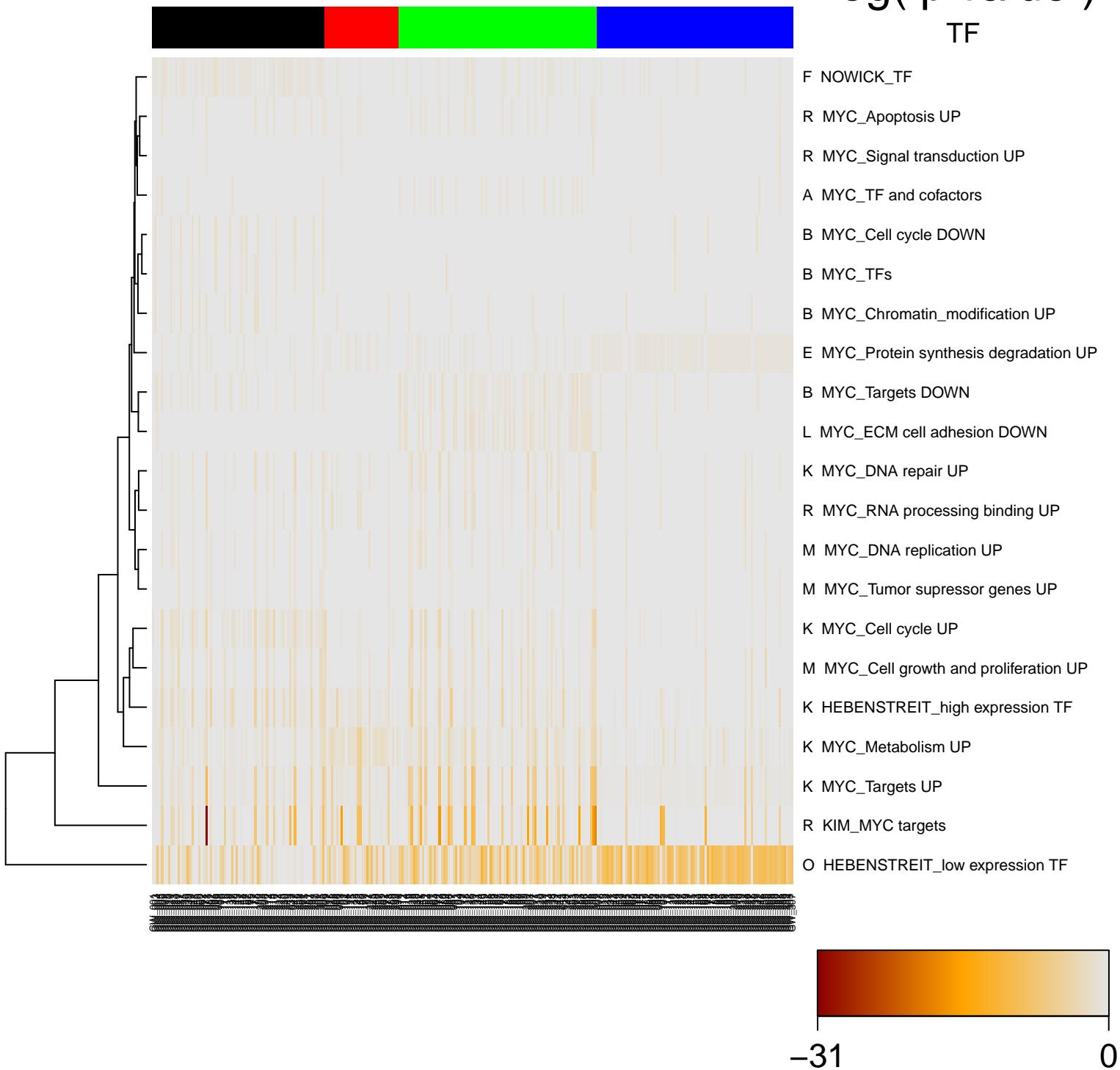
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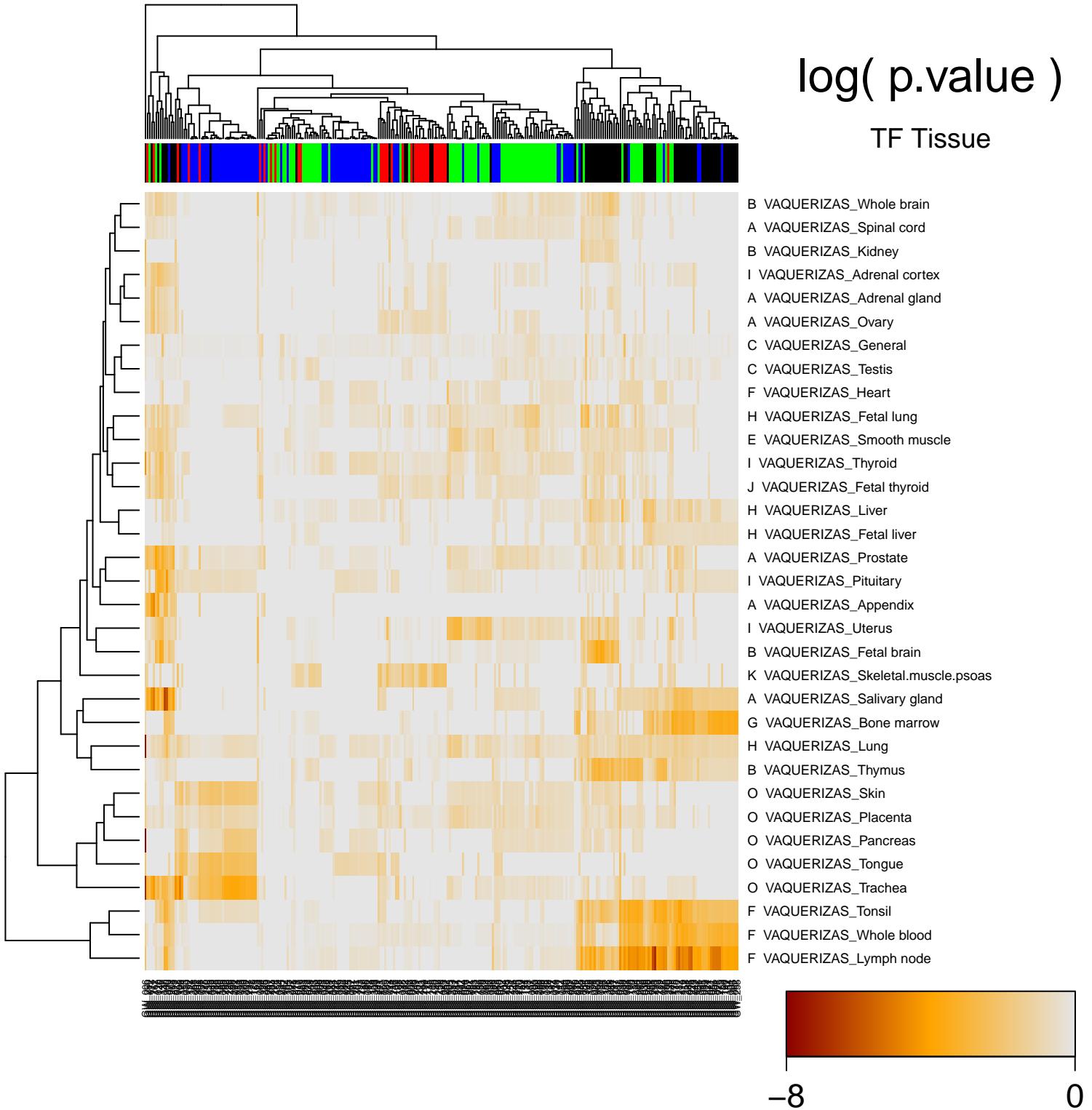
$\log(p\text{.value})$



$\log(p\text{.value})$

TF

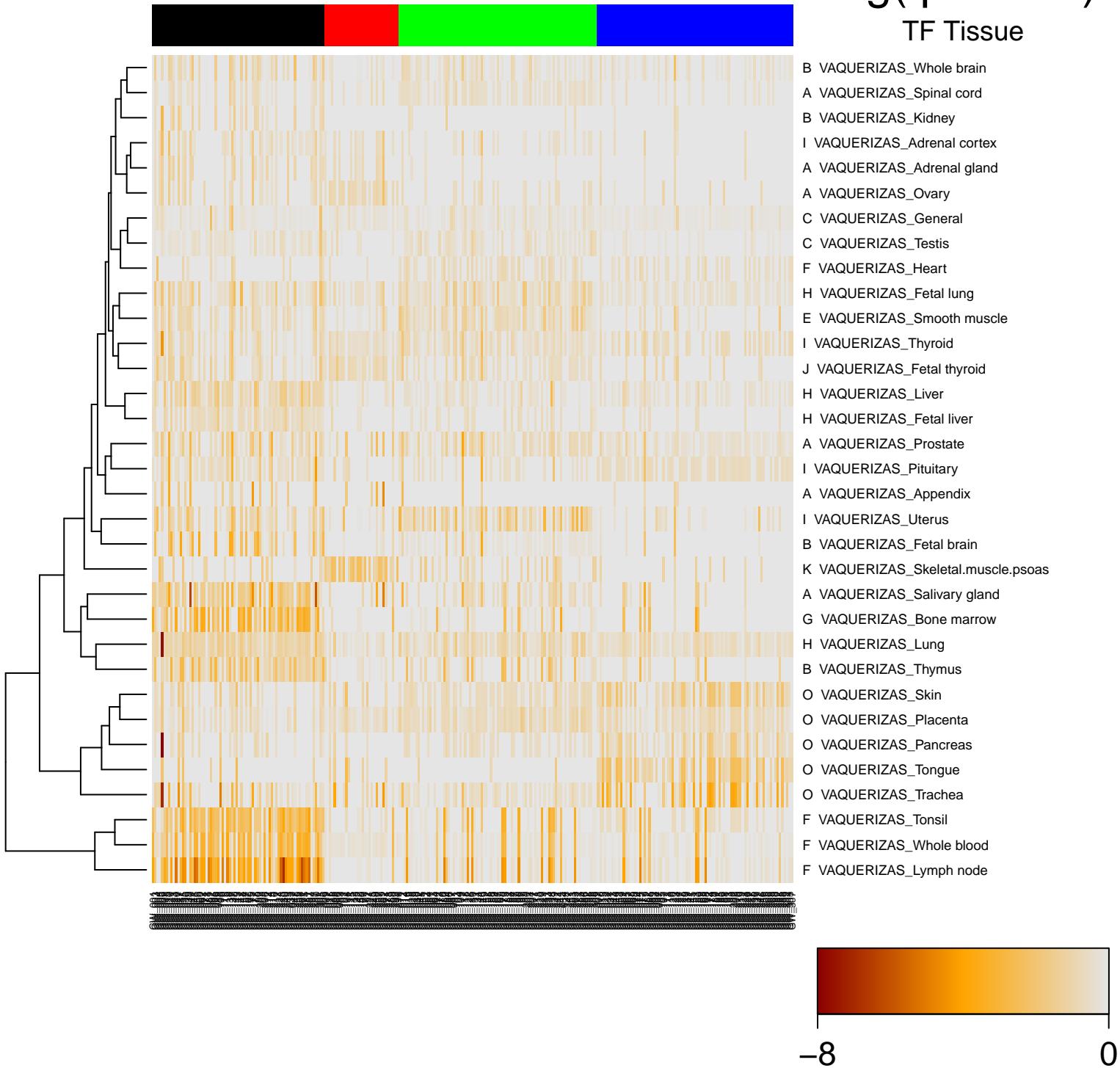




$\log(p\text{.value})$

TF Tissue

- B VAQUERIZAS_Whole brain
- A VAQUERIZAS_Spinal cord
- B VAQUERIZAS_Kidney
- I VAQUERIZAS_Adrenal cortex
- A VAQUERIZAS_Adrenal gland
- A VAQUERIZAS_Ovary
- C VAQUERIZAS_General
- C VAQUERIZAS_Testis
- F VAQUERIZAS_Heart
- H VAQUERIZAS_Fetal lung
- E VAQUERIZAS_Smooth muscle
- I VAQUERIZAS_Thyroid
- J VAQUERIZAS_Fetal thyroid
- H VAQUERIZAS_Liver
- H VAQUERIZAS_Fetal liver
- A VAQUERIZAS_Prostate
- I VAQUERIZAS_Pituitary
- A VAQUERIZAS_Appendix
- I VAQUERIZAS_Uterus
- B VAQUERIZAS_Fetal brain
- K VAQUERIZAS_Skeletal.muscle.psoas
- A VAQUERIZAS_Salivary gland
- G VAQUERIZAS_Bone marrow
- H VAQUERIZAS_Lung
- B VAQUERIZAS_Thymus
- O VAQUERIZAS_Skin
- O VAQUERIZAS_Placenta
- O VAQUERIZAS_Pancreas
- O VAQUERIZAS_Tongue
- O VAQUERIZAS_Trachea
- F VAQUERIZAS_Tonsil
- F VAQUERIZAS_Whole blood
- F VAQUERIZAS_Lymph node



p-value (Fisher)

