

CKLE\_CELL\_DISEASE\_UP, JISON\_SICKLE\_CELL\_DISEASE\_UP

HUANG\_GATA2\_TARGETS\_UP, HUANG\_GATA2\_TARGETS\_UP  
KARLSSON\_TGFB1\_TARGETS\_DN, KARLSSON\_TGFB1\_TARGETS\_DN  
XIE\_ST\_HSC\_S1PR3\_OE\_UP, XIE\_ST\_HSC\_S1PR3\_OE\_UP  
CHIARADONNA\_NEOPLASTIC\_TRANSFORMATION\_CDC25\_DN, CHIARADONNA\_NEOPLASTIC\_TRANSFORMATION\_CDC25\_DN  
BOSCO\_INTERFERON\_INDUCED\_ANTIVIRAL\_MODULE, BOSCO\_INTERFERON\_INDUCED\_ANTIVIRAL\_MODULE  
JIANG\_HYPOXIA\_NORMAL, JIANG\_HYPOXIA\_NORMAL  
CHIARADONNA\_NEOPLASTIC\_TRANSFORMATION\_KRAS\_DN, CHIARADONNA\_NEOPLASTIC\_TRANSFORMATION\_KRAS\_DN  
ACOSTA\_PROLIFERATION\_INDEPENDENT\_MYC\_TARGETS\_DN, ACOSTA\_PROLIFERATION\_INDEPENDENT\_MYC\_TARGETS\_DN  
REACTOME\_INTERFERON\_ALPHA\_BETA\_SIGNALING, REACTOME\_INTERFERON\_ALPHA\_BETA\_SIGNALING  
KRIEG\_KDM3A\_TARGETS\_NOT\_HYPOXIA, KRIEG\_KDM3A\_TARGETS\_NOT\_HYPOXIA  
HOLLERN\_EMT\_BREAST\_TUMOR\_UP, HOLLERN\_EMT\_BREAST\_TUMOR\_UP  
MOSERLE\_IFNA\_RESPONSE, MOSERLE\_IFNA\_RESPONSE  
SASSON\_RESPONSE\_TO\_FORSKOLIN\_DN, SASSON\_RESPONSE\_TO\_FORSKOLIN\_DN  
REACTOME\_INTERFERON\_GAMMA\_SIGNALING, REACTOME\_INTERFERON\_GAMMA\_SIGNALING  
SASSON\_RESPONSE\_TO\_GONADOTROPHINS\_DN, SASSON\_RESPONSE\_TO\_GONADOTROPHINS\_DN  
WP\_TGFBETA\_SIGNALING\_PATHWAY, WP\_TGFBETA\_SIGNALING\_PATHWAY  
GAVIN\_FOXP3\_TARGETS\_CLUSTER\_P3, GAVIN\_FOXP3\_TARGETS\_CLUSTER\_P3  
JACKSON\_DNMT1\_TARGETS\_UP, JACKSON\_DNMT1\_TARGETS\_UP  
LANDIS\_ERBB2\_BREAST\_TUMORS\_324\_UP, LANDIS\_ERBB2\_BREAST\_TUMORS\_324\_UP  
WP\_LEPTIN\_SIGNALING\_PATHWAY, WP\_LEPTIN\_SIGNALING\_PATHWAY  
WP\_THE\_HUMAN\_IMMUNE\_RESPONSE\_TO\_TUBERCULOSIS, WP\_THE\_HUMAN\_IMMUNE\_RESPONSE\_TO\_TUBERCULOSIS  
CASTELLANO\_NRAS\_TARGETS\_UP, CASTELLANO\_NRAS\_TARGETS\_UP  
PID\_PDGFRB\_PATHWAY, PID\_PDGFRB\_PATHWAY  
LANDIS\_ERBB2\_BREAST\_TUMORS\_65\_UP, LANDIS\_ERBB2\_BREAST\_TUMORS\_65\_UP  
DAUER\_STAT3\_TARGETS\_DN, DAUER\_STAT3\_TARGETS\_DN  
EINAV\_INTERFERON\_SIGNATURE\_IN\_CANCER, EINAV\_INTERFERON\_SIGNATURE\_IN\_CANCER  
AFFAR\_YY1\_TARGETS\_UP, AFFAR\_YY1\_TARGETS\_UP  
REACTOME\_MUSCLE\_CONTRACTION, REACTOME\_MUSCLE\_CONTRACTION  
CHIBA\_RESPONSE\_TO\_TSA, CHIBA\_RESPONSE\_TO\_TSA  
YAMAZAKI\_TCEB3\_TARGETS\_UP, YAMAZAKI\_TCEB3\_TARGETS\_UP  
EBAUER\_TARGETS\_OF\_PAX3\_FOXO1\_FUSION\_UP, EBAUER\_TARGETS\_OF\_PAX3\_FOXO1\_FUSION\_UP  
BOSCO\_TH1\_CYTOTOXIC\_MODULE, BOSCO\_TH1\_CYTOTOXIC\_MODULE  
BOWIE\_RESPONSE\_TO\_TAMOXIFEN, BOWIE\_RESPONSE\_TO\_TAMOXIFEN  
REACTOME\_ENDOSOMAL\_VACUOLAR\_PATHWAY, REACTOME\_ENDOSOMAL\_VACUOLAR\_PATHWAY  
WP\_HIPPOMERLIN\_SIGNALING\_DYSREGULATION, WP\_HIPPOMERLIN\_SIGNALING\_DYSREGULATION  
BURTON\_ADIPOGENESIS\_8, BURTON\_ADIPOGENESIS\_8  
HERNANDEZ\_ABERRANT\_MITOSIS\_BY\_DOCETACEL\_4NM\_UP, HERNANDEZ\_ABERRANT\_MITOSIS\_BY\_DOCETACEL\_4NM\_UP  
ZHANG\_INTERFERON\_RESPONSE, ZHANG\_INTERFERON\_RESPONSE  
GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_YELLOW\_DN, GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_YELLOW\_DN  
PID\_RET\_PATHWAY, PID\_RET\_PATHWAY  
KIM\_LRRC3B\_TARGETS, KIM\_LRRC3B\_TARGETS  
REACTOME\_ANTIGEN\_PRESENTATION\_FOLDING\_ASSEMBLY\_AND\_PEPTIDE\_LOADING\_OF\_CLASS\_I\_MHC, REACTOME\_ANTIGEN\_PRESENTATION\_FOLDING\_ASSEMBLY\_AND\_PEPTIDE\_LOADING\_OF\_CLASS\_I\_MHC  
PID\_A6B1\_A6B4\_INTEGRIN\_PATHWAY, PID\_A6B1\_A6B4\_INTEGRIN\_PATHWAY  
ZHAN\_MULTIPLE\_MYELOMA\_LB\_DN, ZHAN\_MULTIPLE\_MYELOMA\_LB\_DN  
REACTOME\_SIGNALING\_BY\_NTRKS, REACTOME\_SIGNALING\_BY\_NTRKS  
NUTT\_GBM\_VS\_AO\_GLIOMA\_UP, NUTT\_GBM\_VS\_AO\_GLIOMA\_UP  
WP\_KIT\_RECEPTOR\_SIGNALING\_PATHWAY, WP\_KIT\_RECEPTOR\_SIGNALING\_PATHWAY  
KEGG\_SNARE\_INTERACTIONS\_IN\_VESICULAR\_TRANSPORT, KEGG\_SNARE\_INTERACTIONS\_IN\_VESICULAR\_TRANSPORT  
HUANG\_DASATINIB\_SENSITIVITY\_UP, HUANG\_DASATINIB\_SENSITIVITY\_UP  
KEGG\_ANTIGEN\_PROCESSING\_AND\_PRESENTATION, KEGG\_ANTIGEN\_PROCESSING\_AND\_PRESENTATION  
KRASNOSELSKAYA\_ILF3\_TARGETS\_UP, KRASNOSELSKAYA\_ILF3\_TARGETS\_UP  
BIOCARTA\_P38MAPK\_PATHWAY, BIOCARTA\_P38MAPK\_PATHWAY  
SMIRNOV\_RESPONSE\_TO\_IR\_2HR\_DN, SMIRNOV\_RESPONSE\_TO\_IR\_2HR\_DN  
GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_BROWN\_UP, GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_BROWN\_UP  
REACTOME\_RHO\_GTPASES\_ACTIVATE\_ROCKS, REACTOME\_RHO\_GTPASES\_ACTIVATE\_ROCKS  
MARSON\_FOXP3\_CORE\_DIRECT\_TARGETS, MARSON\_FOXP3\_CORE\_DIRECT\_TARGETS  
SASAI\_RESISTANCE\_TO\_NEOPLASTIC\_TRANSFROMATION, SASAI\_RESISTANCE\_TO\_NEOPLASTIC\_TRANSFROMATION  
REACTOME\_SEMA4D\_INDUCED\_CELL\_MIGRATION\_AND\_GROWTH\_CONE\_COLLAPSE, REACTOME\_SEMA4D\_INDUCED\_CELL\_MIGRATION\_AND\_GROWTH\_CONE\_COLLAPSE  
MUELLER\_COMMON\_TARGETS\_OF\_AML\_FUSIONS\_DN, MUELLER\_COMMON\_TARGETS\_OF\_AML\_FUSIONS\_DN  
BIOCARTA\_GLEEVEC\_PATHWAY, BIOCARTA\_GLEEVEC\_PATHWAY  
MANNE\_COVID19\_NONICU\_VS\_HEALTHY\_DONOR\_PLATELETS\_UP, MANNE\_COVID19\_NONICU\_VS\_HEALTHY\_DONOR\_PLATELETS\_UP  
IIZUKA\_LIVER\_CANCER\_PROGRESSION\_L0\_L1\_DN, IIZUKA\_LIVER\_CANCER\_PROGRESSION\_L0\_L1\_DN  
RUAN\_RESPONSE\_TO\_TROGLITAZONE\_UP, RUAN\_RESPONSE\_TO\_TROGLITAZONE\_UP  
LEE\_CALORIE\_RESTRICTION\_MUSCLE\_DN, LEE\_CALORIE\_RESTRICTION\_MUSCLE\_DN  
MANNE\_COVID19\_COMBINED\_COHORT\_VS\_HEALTHY\_DONOR\_PLATELETS\_UP, MANNE\_COVID19\_COMBINED\_COHORT\_VS\_HEALTHY\_DONOR\_PLATELETS\_UP  
BROWNE\_HCMV\_INFECTION\_20HR\_DN, BROWNE\_HCMV\_INFECTION\_20HR\_DN  
FINAK\_BREAST\_CANCER\_SDPP\_SIGNATURE, FINAK\_BREAST\_CANCER\_SDPP\_SIGNATURE  
SPIELMAN\_LYMPHOBLAST\_EUROPEAN\_VS\_ASIAN\_2FC\_DN, SPIELMAN\_LYMPHOBLAST\_EUROPEAN\_VS\_ASIAN\_2FC\_DN  
GRANDVAUX\_IFN\_RESPONSE\_NOT\_VIA\_IRF3, GRANDVAUX\_IFN\_RESPONSE\_NOT\_VIA\_IRF3  
BIOCARTA\_CHEMICAL\_PATHWAY, BIOCARTA\_CHEMICAL\_PATHWAY  
WP\_PDGFRBETA\_PATHWAY, WP\_PDGFRBETA\_PATHWAY  
REACTOME\_ERYTHROCYTES\_TAKE\_UP\_OXYGEN\_AND\_RELEASE CARBON\_DIOXIDE, REACTOME\_ERYTHROCYTES\_TAKE\_UP\_OXYGEN\_AND\_RELEASE CARBON\_DIOXIDE  
PID\_KIT\_PATHWAY, PID\_KIT\_PATHWAY  
WP\_RANKLRANK\_RECEPTOR\_ACTIVATOR\_OF\_NFKB\_LIGAND\_SIGNALING\_PATHWAY, WP\_RANKLRANK\_RECEPTOR\_ACTIVATOR\_OF\_NFKB\_LIGAND\_SIGNALING\_PATHWAY  
VALK\_AML\_WITH\_EV11, VALK\_AML\_WITH\_EV11  
REACTOME\_SEMA4D\_IN\_SEMAPHORIN\_SIGNALING, REACTOME\_SEMA4D\_IN\_SEMAPHORIN\_SIGNALING  
PID\_INTEGRIN\_CS\_PATHWAY, PID\_INTEGRIN\_CS\_PATHWAY  
BERTUCCI\_INVASIVE\_CARCINOMA\_DUCTAL\_VS\_LOBULAR\_UP, BERTUCCI\_INVASIVE\_CARCINOMA\_DUCTAL\_VS\_LOBULAR\_UP  
SEITZ\_NEOPLASTIC\_TRANSFORMATION\_BY\_8P\_DELETION\_UP, SEITZ\_NEOPLASTIC\_TRANSFORMATION\_BY\_8P\_DELETION\_UP  
NAKAMURA\_METASTASIS, NAKAMURA\_METASTASIS  
KEGG\_PORPHYRIN\_AND\_CHLOROPHYLL\_METABOLISM, KEGG\_PORPHYRIN\_AND\_CHLOROPHYLL\_METABOLISM  
AKL\_HTLV1\_INFECTION\_UP, AKL\_HTLV1\_INFECTION\_UP  
REACTOME\_G\_PROTEIN\_ACTIVATION, REACTOME\_G\_PROTEIN\_ACTIVATION  
REACTOME\_SIALIC\_ACID\_METABOLISM, REACTOME\_SIALIC\_ACID\_METABOLISM  
GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_RED\_DN, GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_RED\_DN  
KEGG\_RENIN\_ANGIOTENSIN\_SYSTEM, KEGG\_RENIN\_ANGIOTENSIN\_SYSTEM  
GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_GREY\_DN, GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_GREY\_DN  
SATO\_SILENCED\_BY\_METHYLATION\_IN\_PANCREATIC\_CANCER\_2, SATO\_SILENCED\_BY\_METHYLATION\_IN\_PANCREATIC\_CANCER\_2  
HASINA\_NOL7\_TARGETS\_UP, HASINA\_NOL7\_TARGETS\_UP  
REACTOME\_SMOOTH\_MUSCLE\_CONTRACTION, REACTOME\_SMOOTH\_MUSCLE\_CONTRACTION  
EBAUER\_MYOGENIC\_TARGETS\_OF\_PAX3\_FOXO1\_FUSION, EBAUER\_MYOGENIC\_TARGETS\_OF\_PAX3\_FOXO1\_FUSION