

RESPONSE\_TO\_STARVATION, REACTOME\_CELLULAR\_RESPONSE\_TO\_STARVATION

REACTOME\_EUKARYOTIC\_TRANSLATION\_INITIATION, REACTOME\_EUKARYOTIC\_TRANSLATION\_INITIATION  
REACTOME\_ACTIVATION\_OF\_THE\_MRNA\_UPON\_BINDING\_OF\_THE\_CAP\_BINDING\_COMPLEX\_AND\_EIFS\_AND\_SUBSEQUENT\_BINDING\_TO\_43S, REACTOME\_ACTIVATION\_OF\_THE\_MRNA\_UPON\_BINDING\_OF\_THE\_CAP\_BINDING\_COMPLEX\_AND\_EIFS\_AND  
REACTOME\_REGULATION\_OF\_EXPRESSION\_OF\_SLITS\_AND\_ROBOS, REACTOME\_REGULATION\_OF\_EXPRESSION\_OF\_SLITS\_AND\_ROBOS  
REACTOME\_SRP\_DEPENDENT\_COTRANSLATIONAL\_PROTEIN\_TARGETING\_TO\_MEMBRANE, REACTOME\_SRP\_DEPENDENT\_COTRANSLATIONAL\_PROTEIN\_TARGETING\_TO\_MEMBRANE  
WP\_CYTOPLASMIC\_RIBOSOMAL\_PROTEINS, WP\_CYTOPLASMIC\_RIBOSOMAL\_PROTEINS  
REACTOME\_RESPONSE\_OF\_EIF2AK4\_GCN2\_TO\_AMINO\_ACID\_DEFICIENCY, REACTOME\_RESPONSE\_OF\_EIF2AK4\_GCN2\_TO\_AMINO\_ACID\_DEFICIENCY  
REACTOME\_NONSENSE\_MEDIATED\_DECAY\_NMD, REACTOME\_NONSENSE\_MEDIATED\_DECAY\_NMD  
REACTOME\_EUKARYOTIC\_TRANSLATION\_ELONGATION, REACTOME\_EUKARYOTIC\_TRANSLATION\_ELONGATION  
REACTOME\_SELENOAMINO\_ACID\_METABOLISM, REACTOME\_SELENOAMINO\_ACID\_METABOLISM  
KEGG\_RIBOSOME, KEGG\_RIBOSOME  
REACTOME\_RRNA\_MODIFICATION\_IN\_THE\_NUCLEUS\_AND\_CYTOSOL, REACTOME\_RRNA\_MODIFICATION\_IN\_THE\_NUCLEUS\_AND\_CYTOSOL  
BILANGES\_SERUM\_AND\_RAPAMYCIN\_SENSITIVE\_GENES, BILANGES\_SERUM\_AND\_RAPAMYCIN\_SENSITIVE\_GENES  
JISON\_SICKLE\_CELL\_DISEASE\_DN, JISON\_SICKLE\_CELL\_DISEASE\_DN  
PECE\_MAMMARY\_STEM\_CELL\_UP, PECE\_MAMMARY\_STEM\_CELL\_UP  
REACTOME\_AMINO\_ACIDS\_REGULATE\_MTORC1, REACTOME\_AMINO\_ACIDS\_REGULATE\_MTORC1  
PID\_MTOR\_4PATHWAY, PID\_MTOR\_4PATHWAY  
IRITANI\_MAD1\_TARGETS\_DN, IRITANI\_MAD1\_TARGETS\_DN  
TAKAO\_RESPONSE\_TO\_UVB\_RADIATION\_UP, TAKAO\_RESPONSE\_TO\_UVB\_RADIATION\_UP  
GAVIN\_FOXP3\_TARGETS\_CLUSTER\_T7, GAVIN\_FOXP3\_TARGETS\_CLUSTER\_T7  
CHNG\_MULTIPLE\_MYELOMA\_HYPERPLOID\_UP, CHNG\_MULTIPLE\_MYELOMA\_HYPERPLOID\_UP  
ANDERSEN\_LIVER\_CANCER\_KRT19\_UP, ANDERSEN\_LIVER\_CANCER\_KRT19\_UP  
REACTOME\_TP53\_REGULATES\_METABOLIC\_GENES, REACTOME\_TP53\_REGULATES\_METABOLIC\_GENES  
REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_POLK, REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_POLK  
YAMASHITA\_LIVER\_CANCER\_WITH\_EPCAM\_UP, YAMASHITA\_LIVER\_CANCER\_WITH\_EPCAM\_UP  
REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_POLH, REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_POLH  
TIEN\_INTESTINE\_PROBIOTICS\_6HR\_UP, TIEN\_INTESTINE\_PROBIOTICS\_6HR\_UP  
REACTOME\_AUTOPHAGY, REACTOME\_AUTOPHAGY  
HOLLEMAN\_ASPARAGINASE\_RESISTANCE\_ALL\_UP, HOLLEMAN\_ASPARAGINASE\_RESISTANCE\_ALL\_UP  
LINDGREN\_BLADDER\_CANCER\_CLUSTER\_1\_UP, LINDGREN\_BLADDER\_CANCER\_CLUSTER\_1\_UP  
NUTT\_GBM\_VS\_AO\_GLIOMA\_DN, NUTT\_GBM\_VS\_AO\_GLIOMA\_DN  
ADDYA\_ERYTHROID\_DIFFERENTIATION\_BY\_HEMIN, ADDYA\_ERYTHROID\_DIFFERENTIATION\_BY\_HEMIN  
KEGG\_LYSOSOME, KEGG\_LYSOSOME  
HOLLEMAN\_ASPARAGINASE\_RESISTANCE\_B\_ALL\_UP, HOLLEMAN\_ASPARAGINASE\_RESISTANCE\_B\_ALL\_UP  
ZHANG\_PROLIFERATING\_VS\_QUIESCENT, ZHANG\_PROLIFERATING\_VS\_QUIESCENT  
KEGG\_MTOR\_SIGNALING\_PATHWAY, KEGG\_MTOR\_SIGNALING\_PATHWAY  
REACTOME\_REGULATION\_OF\_TP53\_EXPRESSION\_AND\_DEGRADATION, REACTOME\_REGULATION\_OF\_TP53\_EXPRESSION\_AND\_DEGRADATION  
WANG\_PROSTATE\_CANCER\_ANDROGEN\_INDEPENDENT, WANG\_PROSTATE\_CANCER\_ANDROGEN\_INDEPENDENT  
POMEROY\_MEDULLOBLASTOMA\_PROGNOSIS\_DN, POMEROY\_MEDULLOBLASTOMA\_PROGNOSIS\_DN  
ACEVEDO\_NORMAL\_TISSUE\_ADJACENT\_TO\_LIVER\_TUMOR\_UP, ACEVEDO\_NORMAL\_TISSUE\_ADJACENT\_TO\_LIVER\_TUMOR\_UP  
REACTOME\_APC\_C\_CDC20\_MEDIATED\_DEGRADATION\_OF\_CYCLIN\_B, REACTOME\_APC\_C\_CDC20\_MEDIATED\_DEGRADATION\_OF\_CYCLIN\_B  
REACTOME\_MTORC1\_MEDIATED\_SIGNALLING, REACTOME\_MTORC1\_MEDIATED\_SIGNALLING  
LUI\_THYROID\_CANCER\_CLUSTER\_3, LUI\_THYROID\_CANCER\_CLUSTER\_3  
KYNG\_RESPONSE\_TO\_H2O2\_VIA\_ERCC6\_DN, KYNG\_RESPONSE\_TO\_H2O2\_VIA\_ERCC6\_DN  
WP\_P13KAKTMTOR\_SIGNALING\_PATHWAY\_AND\_THERAPEUTIC\_OPPORTUNITIES, WP\_P13KAKTMTOR\_SIGNALING\_PATHWAY\_AND\_THERAPEUTIC\_OPPORTUNITIES  
REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY\_THROUGH\_METHYLATION, REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY\_THROUGH\_METHYLATION  
REACTOME\_CD28\_DEPENDENT\_P13K\_AKT\_SIGNALING, REACTOME\_CD28\_DEPENDENT\_P13K\_AKT\_SIGNALING  
WP\_UNFOLDED\_PROTEIN\_RESPONSE, WP\_UNFOLDED\_PROTEIN\_RESPONSE  
BOHN\_PRIMARY\_IMMUNODEFICIENCY\_SYNDROM\_UP, BOHN\_PRIMARY\_IMMUNODEFICIENCY\_SYNDROM\_UP  
WP\_INTERFERON\_TYPE\_I\_SIGNALING\_PATHWAYS, WP\_INTERFERON\_TYPE\_I\_SIGNALING\_PATHWAYS  
WP\_HEAD\_AND\_NECK\_SQUAMOUS\_CELL\_CARCINOMA, WP\_HEAD\_AND\_NECK\_SQUAMOUS\_CELL\_CARCINOMA  
MARTINEZ\_RESPONSE\_TO TRABECTEDIN\_UP, MARTINEZ\_RESPONSE\_TO TRABECTEDIN\_UP  
REACTOME\_REGULATION\_OF\_SIGNALING\_BY\_CBL, REACTOME\_REGULATION\_OF\_SIGNALING\_BY\_CBL  
REACTOME\_NEGATIVE\_REGULATION\_OF\_FLT3, REACTOME\_NEGATIVE\_REGULATION\_OF\_FLT3  
REACTOME\_REGULATION\_OF\_PTEN\_GENE\_TRANSCRIPTION, REACTOME\_REGULATION\_OF\_PTEN\_GENE\_TRANSCRIPTION  
REACTOME\_CALNEXIN\_CALRETICULIN\_CYCLE, REACTOME\_CALNEXIN\_CALRETICULIN\_CYCLE  
REACTOME\_RECYCLING\_OF\_EIF2\_GDP, REACTOME\_RECYCLING\_OF\_EIF2\_GDP  
REACTOME\_BUDDING\_AND\_MATURATION\_OF\_HIV\_VIRION, REACTOME\_BUDDING\_AND\_MATURATION\_OF\_HIV\_VIRION  
CHICAS\_RB1\_TARGETS\_LOW\_SERUM, CHICAS\_RB1\_TARGETS\_LOW\_SERUM  
KEGG\_EPITHELIAL\_CELL\_SIGNALING\_IN\_HELICOBACTER\_PYLORI\_INFECTION, KEGG\_EPITHELIAL\_CELL\_SIGNALING\_IN\_HELICOBACTER\_PYLORI\_INFECTION  
REACTOME\_MAP3K8\_TPL2\_DEPENDENT\_MAPK1\_3\_ACTIVATION, REACTOME\_MAP3K8\_TPL2\_DEPENDENT\_MAPK1\_3\_ACTIVATION  
WP\_ONCOSTATIN\_M\_SIGNALING\_PATHWAY, WP\_ONCOSTATIN\_M\_SIGNALING\_PATHWAY  
WP\_TRANSLATION\_INHIBITORS\_IN\_CHRONICALLY\_ACTIVATED\_PDGFR\_A\_CELLS, WP\_TRANSLATION\_INHIBITORS\_IN\_CHRONICALLY\_ACTIVATED\_PDGFR\_A\_CELLS  
WP\_GASTRIN\_SIGNALING\_PATHWAY, WP\_GASTRIN\_SIGNALING\_PATHWAY  
CREIGHTON\_AKT1\_SIGNALING\_VIA\_MTOR\_DN, CREIGHTON\_AKT1\_SIGNALING\_VIA\_MTOR\_DN  
WP\_NEURODEGENERATION\_WITH\_BRAIN\_IRON\_ACCUMULATION\_NBIA\_SUBTYPES\_PATHWAY, WP\_NEURODEGENERATION\_WITH\_BRAIN\_IRON\_ACCUMULATION\_NBIA\_SUBTYPES\_PATHWAY  
ASTIER\_INTEGRIN\_SIGNALING, ASTIER\_INTEGRIN\_SIGNALING  
REACTOME\_TRANSFERRIN\_ENDOCYTOSIS\_AND\_RECYCLING, REACTOME\_TRANSFERRIN\_ENDOCYTOSIS\_AND\_RECYCLING  
FLOTHO\_PEDIATRIC\_ALL\_THERAPY\_RESPONSE\_UP, FLOTHO\_PEDIATRIC\_ALL\_THERAPY\_RESPONSE\_UP  
DIRMEIER\_LMP1\_RESPONSE\_LATE\_DN, DIRMEIER\_LMP1\_RESPONSE\_LATE\_DN  
PURBEY\_TARGETS\_OF\_CTBP1\_AND\_SATB1\_UP, PURBEY\_TARGETS\_OF\_CTBP1\_AND\_SATB1\_UP  
MARTORIATI\_MDM4\_TARGETS\_NEUROEPITHELIUM\_UP, MARTORIATI\_MDM4\_TARGETS\_NEUROEPITHELIUM\_UP  
REACTOME\_SPRY\_REGULATION\_OF\_FGF\_SIGNALING, REACTOME\_SPRY\_REGULATION\_OF\_FGF\_SIGNALING  
POS\_RESPONSE\_TO\_HISTAMINE\_DN, POS\_RESPONSE\_TO\_HISTAMINE\_DN  
REACTOME\_INLB\_MEDIATED\_ENTRY\_OF\_LISTERIA\_MONOCYTOGENES\_INTO\_HOST\_CELL, REACTOME\_INLB\_MEDIATED\_ENTRY\_OF\_LISTERIA\_MONOCYTOGENES\_INTO\_HOST\_CELL  
REACTOME\_DOWNREGULATION\_OF\_SMAD2\_3\_SMAD4\_TRANSCRIPTIONAL\_ACTIVITY, REACTOME\_DOWNREGULATION\_OF\_SMAD2\_3\_SMAD4\_TRANSCRIPTIONAL\_ACTIVITY  
PID\_LKB1\_PATHWAY, PID\_LKB1\_PATHWAY  
PID\_P38\_ALPHA\_BETA\_DOWNSTREAM\_PATHWAY, PID\_P38\_ALPHA\_BETA\_DOWNSTREAM\_PATHWAY  
REACTOME\_MYOCLONIC\_EPILEPSY\_OF\_LAFORA, REACTOME\_MYOCLONIC\_EPILEPSY\_OF\_LAFORA  
REACTOME\_REGULATION\_OF\_PTEN\_LOCALIZATION, REACTOME\_REGULATION\_OF\_PTEN\_LOCALIZATION  
REACTOME\_ROS\_AND\_RNS\_PRODUCTION\_IN\_PHAGOCYTES, REACTOME\_ROS\_AND\_RNS\_PRODUCTION\_IN\_PHAGOCYTES  
REACTOME\_ER\_QUALITY\_CONTROL\_COMPARTMENT\_ERQC, REACTOME\_ER\_QUALITY\_CONTROL\_COMPARTMENT\_ERQC  
REACTOME\_LISTERIA\_MONOCYTOGENES\_ENTRY\_INTO\_HOST\_CELLS, REACTOME\_LISTERIA\_MONOCYTOGENES\_ENTRY\_INTO\_HOST\_CELLS  
REACTOME\_SMAD2\_SMAD3\_SMAD4\_HETEROTRIMER\_REGULATES\_TRANSCRIPTION, REACTOME\_SMAD2\_SMAD3\_SMAD4\_HETEROTRIMER\_REGULATES\_TRANSCRIPTION  
REACTOME\_ENERGY\_DEPENDENT\_REGULATION\_OF\_MTOR\_BY\_LKB1\_AMPK, REACTOME\_ENERGY\_DEPENDENT\_REGULATION\_OF\_MTOR\_BY\_LKB1\_AMPK  
REACTOME\_SIGNALING\_BY\_INSULIN\_RECEPTOR, REACTOME\_SIGNALING\_BY\_INSULIN\_RECEPTOR  
REACTOME\_INACTIVATION\_OF\_CSF3\_G\_CSF\_SIGNALING, REACTOME\_INACTIVATION\_OF\_CSF3\_G\_CSF\_SIGNALING  
REACTOME\_TICAM1\_DEPENDENT\_ACTIVATION\_OF\_IRF3\_IRF7, REACTOME\_TICAM1\_DEPENDENT\_ACTIVATION\_OF\_IRF3\_IRF7  
MODY\_HIPPOCAMPUS\_POSTNATAL, MODY\_HIPPOCAMPUS\_POSTNATAL