

C\_TRANSLATION\_INITIATION, REACTOME\_EUKARYOTIC\_TRANSLATION\_INITIATION

NMD, REACTOME\_DECAY\_NMD, REACTOME\_DECAY\_NMD  
 REACTOME\_REGULATION\_OF\_EXPRESSION\_OF\_SLITS\_AND\_ROBOS, REACTOME\_REGULATION\_OF\_EXPRESSION\_OF\_SLITS\_AND\_ROBOS  
 KEGG\_RIBOSOME, KEGG\_RIBOSOME  
 REACTOME\_EUKARYOTIC\_TRANSLATION\_ELONGATION, REACTOME\_EUKARYOTIC\_TRANSLATION\_ELONGATION  
 REACTOME\_RESPONSE\_OF\_EIF2AK4\_GCN2\_TO\_AMINO\_ACID\_DEFICIENCY, REACTOME\_RESPONSE\_OF\_EIF2AK4\_GCN2\_TO\_AMINO\_ACID\_DEFICIENCY  
 WP\_CYTOPLASMIC\_RIBOSOMAL\_PROTEINS, WP\_CYTOPLASMIC\_RIBOSOMAL\_PROTEINS  
 REACTOME\_SRP\_DEPENDENT\_COTRANSLATIONAL\_PROTEIN\_TARGETING\_TO\_MEMBRANE, REACTOME\_SRP\_DEPENDENT\_COTRANSLATIONAL\_PROTEIN\_TARGETING\_TO\_MEMBRANE  
 REACTOME\_SELENOAMINO\_ACID\_METABOLISM, REACTOME\_SELENOAMINO\_ACID\_METABOLISM  
 BILANGES\_SERUM\_AND\_RAPAMYCIN\_SENSITIVE\_GENES, BILANGES\_SERUM\_AND\_RAPAMYCIN\_SENSITIVE\_GENES  
 REACTOME\_CELLULAR\_RESPONSE\_TO\_STARVATION, REACTOME\_CELLULAR\_RESPONSE\_TO\_STARVATION  
 DANG\_MYC\_TARGETS\_UP, DANG\_MYC\_TARGETS\_UP  
 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  
 LEE\_LIVER\_CANCER\_SURVIVAL\_DN, LEE\_LIVER\_CANCER\_SURVIVAL\_DN  
 REACTOME\_RRNA\_MODIFICATION\_IN\_THE\_NUCLEUS\_AND\_CYTOSOL, REACTOME\_RRNA\_MODIFICATION\_IN\_THE\_NUCLEUS\_AND\_CYTOSOL  
 KARLSSON\_TGFB1\_TARGETS\_UP, KARLSSON\_TGFB1\_TARGETS\_UP  
 CHNG\_MULTIPLE\_MYELOMA\_HYPERPLOID\_UP, CHNG\_MULTIPLE\_MYELOMA\_HYPERPLOID\_UP  
 FLECHNER\_PBL\_KIDNEY\_TRANSPLANT\_OK\_VS\_DONOR\_UP, FLECHNER\_PBL\_KIDNEY\_TRANSPLANT\_OK\_VS\_DONOR\_UP  
 IRITANI\_MAD1\_TARGETS\_DN, IRITANI\_MAD1\_TARGETS\_DN  
 TAKAO\_RESPONSE\_TO\_UVB\_RADIATION\_UP, TAKAO\_RESPONSE\_TO\_UVB\_RADIATION\_UP  
 DIAZ\_CHRONIC\_MEYLOGENOUS\_LEUKEMIA\_DN, DIAZ\_CHRONIC\_MEYLOGENOUS\_LEUKEMIA\_DN  
 TIEN\_INTESTINE\_PROBIOTICS\_6HR\_UP, TIEN\_INTESTINE\_PROBIOTICS\_6HR\_UP  
 CHAUHAN\_RESPONSE\_TO\_METHOXYESTRADIOL\_DN, CHAUHAN\_RESPONSE\_TO\_METHOXYESTRADIOL\_DN  
 PECE\_MAMMARY\_STEM\_CELL\_UP, PECE\_MAMMARY\_STEM\_CELL\_UP  
 REACTOME\_AUF1\_HNRNP\_D0\_BINDS\_AND\_DESTABILIZES\_MRNA, REACTOME\_AUF1\_HNRNP\_D0\_BINDS\_AND\_DESTABILIZES\_MRNA  
 REACTOME\_ANTIVIRAL\_MECHANISM\_BY\_IFN\_STIMULATED\_GENES, REACTOME\_ANTIVIRAL\_MECHANISM\_BY\_IFN\_STIMULATED\_GENES  
 POMEROY\_MEDULLOBLASTOMA\_PROGNOSIS\_DN, POMEROY\_MEDULLOBLASTOMA\_PROGNOSIS\_DN  
 WP\_TRANSLATION\_FACTORS, WP\_TRANSLATION\_FACTORS  
 KAYO\_AGING\_MUSCLE\_DN, KAYO\_AGING\_MUSCLE\_DN  
 GAVIN\_FOXP3\_TARGETS\_CLUSTER\_T7, GAVIN\_FOXP3\_TARGETS\_CLUSTER\_T7  
 YAMASHITA\_LIVER\_CANCER\_WITH\_EPCAM\_UP, YAMASHITA\_LIVER\_CANCER\_WITH\_EPCAM\_UP  
 TIEN\_INTESTINE\_PROBIOTICS\_2HR\_UP, TIEN\_INTESTINE\_PROBIOTICS\_2HR\_UP  
 ZHU\_CMV\_24\_HR\_UP, ZHU\_CMV\_24\_HR\_UP  
 LINDGREN\_BLADDER\_CANCER\_CLUSTER\_1\_UP, LINDGREN\_BLADDER\_CANCER\_CLUSTER\_1\_UP  
 DAIRKEE\_CANCER\_PRONE\_RESPONSE\_BPA\_E2, DAIRKEE\_CANCER\_PRONE\_RESPONSE\_BPA\_E2  
 PID\_MYC\_ACTIV\_PATHWAY, PID\_MYC\_ACTIV\_PATHWAY  
 BILANGES\_SERUM\_RESPONSE\_TRANSLATION, BILANGES\_SERUM\_RESPONSE\_TRANSLATION  
 BILANGES\_RAPAMYCIN\_SENSITIVE\_VIA\_TSC1\_AND\_TSC2, BILANGES\_RAPAMYCIN\_SENSITIVE\_VIA\_TSC1\_AND\_TSC2  
 FLOTHO\_PEDIATRIC\_ALL\_THERAPY\_RESPONSE\_UP, FLOTHO\_PEDIATRIC\_ALL\_THERAPY\_RESPONSE\_UP  
 FERNANDEZ\_BOUND\_BY\_MYC, FERNANDEZ\_BOUND\_BY\_MYC  
 PID\_MTOR\_4PATHWAY, PID\_MTOR\_4PATHWAY  
 REACTOME\_MTOR\_SIGNALLING, REACTOME\_MTOR\_SIGNALLING  
 ACEVEDO\_NORMAL\_TISSUE\_ADJACENT\_TO\_LIVER\_TUMOR\_UP, ACEVEDO\_NORMAL\_TISSUE\_ADJACENT\_TO\_LIVER\_TUMOR\_UP  
 TONG\_INTERACT\_WITH\_PTTG1, TONG\_INTERACT\_WITH\_PTTG1  
 HOLLEMAN\_ASPARAGINASE\_RESISTANCE\_B\_ALL\_UP, HOLLEMAN\_ASPARAGINASE\_RESISTANCE\_B\_ALL\_UP  
 BIOCARTA\_EIF\_PATHWAY, BIOCARTA\_EIF\_PATHWAY  
 LUL\_THYROID\_CANCER\_PAX8\_PPARG\_DN, LUL\_THYROID\_CANCER\_PAX8\_PPARG\_DN  
 REACTOME\_DEADENYLATION\_OF\_MRNA, REACTOME\_DEADENYLATION\_OF\_MRNA  
 REACTOME\_ABC\_FAMILY\_PROTEINS\_MEDIATED\_TRANSPORT, REACTOME\_ABC\_FAMILY\_PROTEINS\_MEDIATED\_TRANSPORT  
 ZHU\_CMV\_ALL\_UP, ZHU\_CMV\_ALL\_UP  
 HOEBEKE\_LYMPHOID\_STEM\_CELL\_DN, HOEBEKE\_LYMPHOID\_STEM\_CELL\_DN  
 ZHOU\_TNF\_SIGNALING\_4HR, ZHOU\_TNF\_SIGNALING\_4HR  
 LI\_AMPLIFIED\_IN\_LUNG\_CANCER, LI\_AMPLIFIED\_IN\_LUNG\_CANCER  
 LUL\_THYROID\_CANCER\_CLUSTER\_3, LUL\_THYROID\_CANCER\_CLUSTER\_3  
 LUL\_TARGETS\_OF\_PAX8\_PPARG\_FUSION, LUL\_TARGETS\_OF\_PAX8\_PPARG\_FUSION  
 REACTOME\_RIPK1\_MEDIATED\_REGULATED\_NECROSIS, REACTOME\_RIPK1\_MEDIATED\_REGULATED\_NECROSIS  
 PURBEY\_TARGETS\_OF\_CTBP1\_AND\_SATB1\_UP, PURBEY\_TARGETS\_OF\_CTBP1\_AND\_SATB1\_UP  
 REACTOME\_PERK\_REGULATES\_GENE\_EXPRESSION, REACTOME\_PERK\_REGULATES\_GENE\_EXPRESSION  
 KYNG\_RESPONSE\_TO\_H2O2\_VIA\_ERCC6\_DN, KYNG\_RESPONSE\_TO\_H2O2\_VIA\_ERCC6\_DN  
 WP\_BRAINERIVED\_NEUROTROPHIC\_FACTOR\_BDNF\_SIGNALING\_PATHWAY, WP\_BRAINERIVED\_NEUROTROPHIC\_FACTOR\_BDNF\_SIGNALING\_PATHWAY  
 SWEET\_KRAS\_ONCOGENIC\_SIGNATURE, SWEET\_KRAS\_ONCOGENIC\_SIGNATURE  
 REACTOME\_MTORC1\_MEDIATED\_SIGNALLING, REACTOME\_MTORC1\_MEDIATED\_SIGNALLING  
 REACTOME\_SYNTHESIS\_OF\_ACTIVE\_UBIQUITIN\_ROLES\_OF\_E1\_AND\_E2\_ENZYMES, REACTOME\_SYNTHESIS\_OF\_ACTIVE\_UBIQUITIN\_ROLES\_OF\_E1\_AND\_E2\_ENZYMES  
 REACTOME\_RESPONSE\_OF\_EIF2AK1\_HRL\_TO\_HEME\_DEFICIENCY, REACTOME\_RESPONSE\_OF\_EIF2AK1\_HRL\_TO\_HEME\_DEFICIENCY  
 REACTOME\_NEGATIVE\_REGULATORS\_OF\_DDX58\_IFIH1\_SIGNALING, REACTOME\_NEGATIVE\_REGULATORS\_OF\_DDX58\_IFIH1\_SIGNALING  
 REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_POLH, REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_POLH  
 WP\_NSP1\_FROM\_SARSCOV2\_INHIBITS\_TRANSLATION\_INITIATION\_IN\_THE\_HOST\_CELL, WP\_NSP1\_FROM\_SARSCOV2\_INHIBITS\_TRANSLATION\_INITIATION\_IN\_THE\_HOST\_CELL  
 HU\_GENOTOXIC\_DAMAGE\_24HR, HU\_GENOTOXIC\_DAMAGE\_24HR  
 BIOCARTA\_EIF2\_PATHWAY, BIOCARTA\_EIF2\_PATHWAY  
 TOOKER\_GEMCITABINE\_RESISTANCE\_UP, TOOKER\_GEMCITABINE\_RESISTANCE\_UP  
 ANDERSEN\_LIVER\_CANCER\_KRT19\_UP, ANDERSEN\_LIVER\_CANCER\_KRT19\_UP  
 REACTOME\_APC\_CDC20\_MEDIATED\_DEGRADATION\_OF\_NEK2A, REACTOME\_APC\_CDC20\_MEDIATED\_DEGRADATION\_OF\_NEK2A  
 BILANGES\_RAPAMYCIN\_SENSITIVE\_GENES, BILANGES\_RAPAMYCIN\_SENSITIVE\_GENES  
 WP\_FOLLICLE\_STIMULATING\_HORMONE\_FSH\_SIGNALING\_PATHWAY, WP\_FOLLICLE\_STIMULATING\_HORMONE\_FSH\_SIGNALING\_PATHWAY  
 HOLLEMAN\_ASPARAGINASE\_RESISTANCE\_ALL\_UP, HOLLEMAN\_ASPARAGINASE\_RESISTANCE\_ALL\_UP  
 REACTOME\_ER\_QUALITY\_CONTROL\_COMPARTMENT\_ERQC, REACTOME\_ER\_QUALITY\_CONTROL\_COMPARTMENT\_ERQC  
 SANA\_RESPONSE\_TO\_IFNG\_DN, SANA\_RESPONSE\_TO\_IFNG\_DN  
 REACTOME\_TRANSLATION\_OF\_SARS\_COV\_2\_STRUCTURAL\_PROTEINS, REACTOME\_TRANSLATION\_OF\_SARS\_COV\_2\_STRUCTURAL\_PROTEINS  
 REACTOME\_TNFR1\_INDUCED\_NFKAPPAB\_SIGNALING\_PATHWAY, REACTOME\_TNFR1\_INDUCED\_NFKAPPAB\_SIGNALING\_PATHWAY  
 REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_POLK, REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_POLK  
 REACTOME\_TNF\_SIGNALING, REACTOME\_TNF\_SIGNALING  
 BOHN\_PRIMARY\_IMMUNODEFICIENCY\_SYNDROM\_UP, BOHN\_PRIMARY\_IMMUNODEFICIENCY\_SYNDROM\_UP  
 REACTOME\_TICAM1\_TRAF6\_DEPENDENT\_INDUCTION\_OF\_TAK1\_COMPLEX, REACTOME\_TICAM1\_TRAF6\_DEPENDENT\_INDUCTION\_OF\_TAK1\_COMPLEX  
 GU\_PDEF\_TARGETS\_DN, GU\_PDEF\_TARGETS\_DN  
 MULLIGHAN\_NPM1\_SIGNATURE\_3\_DN, MULLIGHAN\_NPM1\_SIGNATURE\_3\_DN  
 REACTOME\_RAS\_PROCESSING, REACTOME\_RAS\_PROCESSING  
 REACTOME\_NEGATIVE\_REGULATION\_OF\_FLT3, REACTOME\_NEGATIVE\_REGULATION\_OF\_FLT3  
 REACTOME\_SIGNALING\_BY\_CSF3\_G\_CSF, REACTOME\_SIGNALING\_BY\_CSF3\_G\_CSF  
 REACTOME\_CYCLIN\_D\_ASSOCIATED\_EVENTS\_IN\_G1, REACTOME\_CYCLIN\_D\_ASSOCIATED\_EVENTS\_IN\_G1  
 BIOCARTA\_MTOR\_PATHWAY, BIOCARTA\_MTOR\_PATHWAY  
 REACTOME\_NOD1\_2\_SIGNALING\_PATHWAY, REACTOME\_NOD1\_2\_SIGNALING\_PATHWAY  
 REACTOME\_NEGATIVE\_REGULATION\_OF\_FGFR2\_SIGNALING, REACTOME\_NEGATIVE\_REGULATION\_OF\_FGFR2\_SIGNALING  
 REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY\_THROUGH\_METHYLATION, REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY\_THROUGH\_METHYLATION  
 REACTOME\_TRANSLATION\_OF\_SARS\_COV\_1\_STRUCTURAL\_PROTEINS, REACTOME\_TRANSLATION\_OF\_SARS\_COV\_1\_STRUCTURAL\_PROTEINS  
 GREGORY\_SYNTHETIC\_LETHAL\_WITH\_IMATINIB, GREGORY\_SYNTHETIC\_LETHAL\_WITH\_IMATINIB  
 REACTOME\_APC\_C\_CDC20\_MEDIATED\_DEGRADATION\_OF\_CYCLIN\_B, REACTOME\_APC\_C\_CDC20\_MEDIATED\_DEGRADATION\_OF\_CYCLIN\_B  
 BHATTACHARYA\_EMBRYONIC\_STEM\_CELL, BHATTACHARYA\_EMBRYONIC\_STEM\_CELL  
 REACTOME\_SMAD2\_SMAD3\_SMAD4\_HETEROTRIMER\_REGULATES\_TRANSCRIPTION, REACTOME\_SMAD2\_SMAD3\_SMAD4\_HETEROTRIMER\_REGULATES\_TRANSCRIPTION  
 WALLACE\_PROSTATE\_CANCER\_RACE\_DN, WALLACE\_PROSTATE\_CANCER\_RACE\_DN  
 REACTOME\_NEGATIVE\_REGULATION\_OF\_FGFR3\_SIGNALING, REACTOME\_NEGATIVE\_REGULATION\_OF\_FGFR3\_SIGNALING  
 LU\_IL4\_SIGNALING, LU\_IL4\_SIGNALING  
 BIOCARTA\_VEGF\_PATHWAY, BIOCARTA\_VEGF\_PATHWAY  
 REACTOME\_NEGATIVE\_REGULATION\_OF\_FGFR1\_SIGNALING, REACTOME\_NEGATIVE\_REGULATION\_OF\_FGFR1\_SIGNALING  
 REACTOME\_TRAF6\_MEDIATED\_INDUCTION\_OF\_TAK1\_COMPLEX\_WITHIN\_TLR4\_COMPLEX, REACTOME\_TRAF6\_MEDIATED\_INDUCTION\_OF\_TAK1\_COMPLEX\_WITHIN\_TLR4\_COMPLEX  
 REACTOME\_ALPHA\_PROTEIN\_KINASE\_1\_SIGNALING\_PATHWAY, REACTOME\_ALPHA\_PROTEIN\_KINASE\_1\_SIGNALING\_PATHWAY  
 NUTT\_GBM\_VS\_AO\_GLIOMA\_DN, NUTT\_GBM\_VS\_AO\_GLIOMA\_DN  
 KYNG\_ENVIRONMENTAL\_STRESS\_RESPONSE\_UP, KYNG\_ENVIRONMENTAL\_STRESS\_RESPONSE\_UP  
 REACTOME\_ACTIVATED\_TAK1\_MEDIATES\_P38\_MAPK\_ACTIVATION, REACTOME\_ACTIVATED\_TAK1\_MEDIATES\_P38\_MAPK\_ACTIVATION  
 ZHAN\_MULTIPLE\_MYELOMA\_HP\_UP, ZHAN\_MULTIPLE\_MYELOMA\_HP\_UP  
 REACTOME\_OVARIAN\_TUMOR\_DOMAIN\_PROTEASES, REACTOME\_OVARIAN\_TUMOR\_DOMAIN\_PROTEASES  
 REACTOME\_IRAK2\_MEDIATED\_ACTIVATION\_OF\_TAK1\_COMPLEX, REACTOME\_IRAK2\_MEDIATED\_ACTIVATION\_OF\_TAK1\_COMPLEX  
 WP\_HEAD\_AND\_NECK\_SQUAMOUS\_CELL\_CARCINOMA, WP\_HEAD\_AND\_NECK\_SQUAMOUS\_CELL\_CARCINOMA  
 BIOCARTA\_EIF4\_PATHWAY, BIOCARTA\_EIF4\_PATHWAY