

REACTOME\_S\_PHASE, REACTOME\_S\_PHASE  
SOTIRIOU\_BREAST\_CANCER\_GRADE\_1\_VS\_3\_UP, SOTIRIOU\_BREAST\_CANCER\_GRADE\_1\_VS\_3\_UP  
WINNEPENNINGCKX\_MELANOMA\_METASTASIS\_UP, WINNEPENNINGCKX\_MELANOMA\_METASTASIS\_UP  
ROSTY\_CERVICAL\_CANCER\_PROLIFERATION\_CLUSTER, ROSTY\_CERVICAL\_CANCER\_PROLIFERATION\_CLUSTER  
REACTOME\_DNA\_REPLICATION, REACTOME\_DNA\_REPLICATION  
PUJANA\_BRCA\_CENTERED\_NETWORK, PUJANA\_BRCA\_CENTERED\_NETWORK  
REACTOME\_MITOTIC\_G1\_PHASE\_AND\_G1\_S\_TRANSITION, REACTOME\_MITOTIC\_G1\_PHASE\_AND\_G1\_S\_TRANSITION  
FERREIRA\_EWINGS\_SARCOMA\_UNSTABLE\_VS\_STABLE\_UP, FERREIRA\_EWINGS\_SARCOMA\_UNSTABLE\_VS\_STABLE\_UP  
HOFFMANN\_LARGE\_TO\_SMALL\_PRE\_BIL\_LYMPHOCYTE\_UP, HOFFMANN\_LARGE\_TO\_SMALL\_PRE\_BIL\_LYMPHOCYTE\_UP  
WP\_DNA\_REPAIR\_PATHWAYS\_FULL\_NETWORK, WP\_DNA\_REPAIR\_PATHWAYS\_FULL\_NETWORK  
REACTOME\_MITOTIC\_G2\_G2\_M\_PHASES, REACTOME\_MITOTIC\_G2\_G2\_M\_PHASES  
GRAHAM\_CML\_DIVIDING\_VS\_NORMAL\_QUIESCENT\_UP, GRAHAM\_CML\_DIVIDING\_VS\_NORMAL\_QUIESCENT\_UP  
WHITEFORD\_PEDIATRIC\_CANCER\_MARKERS, WHITEFORD\_PEDIATRIC\_CANCER\_MARKERS  
REACTOME\_G2\_M\_CHECKPOINTS, REACTOME\_G2\_M\_CHECKPOINTS  
REACTOME\_NUCLEOTIDE\_EXCISION\_REPAIR, REACTOME\_NUCLEOTIDE\_EXCISION\_REPAIR  
BENPORATH\_PROLIFERATION\_BENPORATH\_PROLIFERATION  
WP\_RETINOBLASTOMA\_GENE\_IN\_CANCER, WP\_RETINOBLASTOMA\_GENE\_IN\_CANCER  
WHITFIELD\_CELL\_CYCLE\_G2\_M, WHITFIELD\_CELL\_CYCLE\_G2\_M  
SARRIO\_EPITHELIAL\_MESENCHYMAL\_TRANSITION\_UP, SARRIO\_EPITHELIAL\_MESENCHYMAL\_TRANSITION\_UP  
KAUFFMANN\_DNA\_REPLICATION\_GENES, KAUFFMANN\_DNA\_REPLICATION\_GENES  
KONG\_E2F3\_TARGETS, KONG\_E2F3\_TARGETS  
REACTOME\_DNA\_DOUBLE\_STRAND\_BREAK\_REPAIR, REACTOME\_DNA\_DOUBLE\_STRAND\_BREAK\_REPAIR  
CHIANG\_LIVER\_CANCER\_SUBCLASS\_PROLIFERATION\_UP, CHIANG\_LIVER\_CANCER\_SUBCLASS\_PROLIFERATION\_UP  
ZHOU\_CELL\_CYCLE\_GENES\_IN\_IR\_RESPONSE\_24HR, ZHOU\_CELL\_CYCLE\_GENES\_IN\_IR\_RESPONSE\_24HR  
CROONQUIST\_IL4\_DEPRIVATION\_DN, CROONQUIST\_IL4\_DEPRIVATION\_DN  
WELCHSH\_BRCA1\_TARGETS\_DN, WELCHSH\_BRCA1\_TARGETS\_DN  
REACTOME\_GLOBAL\_GENOME\_NUCLEOTIDE\_EXCISION\_REPAIR\_GG\_NER, REACTOME\_GLOBAL\_GENOME\_NUCLEOTIDE\_EXCISION\_REPAIR\_GG\_NER  
MORI\_LARGE\_PRE\_BIL\_LYMPHOCYTE\_UP, MORI\_LARGE\_PRE\_BIL\_LYMPHOCYTE\_UP  
MISSIAGLIA\_REGULATED\_BY\_METHYLATION\_DN, MISSIAGLIA\_REGULATED\_BY\_METHYLATION\_DN  
REACTOME\_DNA\_REPLICATION\_PRE\_INITIATION, REACTOME\_DNA\_REPLICATION\_PRE\_INITIATION  
WELCHSH\_BRCA1\_TARGETS\_UP, WELCHSH\_BRCA1\_TARGETS\_UP  
KAUFFMANN\_MELANOMA\_RELAPSE\_UP, KAUFFMANN\_MELANOMA\_RELAPSE\_UP  
REACTOME\_HOMOLOGY\_DIRECTED\_REPAIR, REACTOME\_HOMOLOGY\_DIRECTED\_REPAIR  
REACTOME\_APC\_C\_MEDIATED\_DEGRADATION\_OF\_CELL\_CYCLE\_PROTEINS, REACTOME\_APC\_C\_MEDIATED\_DEGRADATION\_OF\_CELL\_CYCLE\_PROTEINS  
LEE\_EARLY\_T\_T\_LYMPHOCYTE\_UP, LEE\_EARLY\_T\_T\_LYMPHOCYTE\_UP  
REN\_BOUND\_BY\_E2F, REN\_BOUND\_BY\_E2F  
REACTOME\_CYCLIN\_A\_CDK2\_ASSOCIATED\_EVENTS\_AT\_S\_PHASE\_ENTRY, REACTOME\_CYCLIN\_A\_CDK2\_ASSOCIATED\_EVENTS\_AT\_S\_PHASE\_ENTRY  
GRAHAM\_NORMAL\_QUIESCENT\_VS\_NORMAL\_DIVIDING\_DN, GRAHAM\_NORMAL\_QUIESCENT\_VS\_NORMAL\_DIVIDING\_DN  
REACTOME\_TRANSCRIPTION\_COUPLED\_NUCLEOTIDE\_EXCISION\_REPAIR\_TC\_NER, REACTOME\_TRANSCRIPTION\_COUPLED\_NUCLEOTIDE\_EXCISION\_REPAIR\_TC\_NER  
CROONQUIST\_NRAS\_SIGNALING\_DN, CROONQUIST\_NRAS\_SIGNALING\_DN  
REACTOME\_CHROMOSOME\_MAINTENANCE, REACTOME\_CHROMOSOME\_MAINTENANCE  
ALCALA\_APOPTOSIS, ALCALA\_APOPTOSIS  
VERNELL\_RETINOBLASTOMA\_PATHWAY\_UP, VERNELL\_RETINOBLASTOMA\_PATHWAY\_UP  
REACTOME\_AURKA\_ACTIVATION\_BY\_TP53, REACTOME\_AURKA\_ACTIVATION\_BY\_TP53  
BURTON\_ADIPOGENESIS\_3, BURTON\_ADIPOGENESIS\_3  
REACTOME\_ORC1\_REMOVAL\_FROM\_CHROMATIN, REACTOME\_ORC1\_REMOVAL\_FROM\_CHROMATIN  
ZHOU\_CELL\_CYCLE\_GENES\_IN\_IR\_RESPONSE\_6HR, ZHOU\_CELL\_CYCLE\_GENES\_IN\_IR\_RESPONSE\_6HR  
REACTOME\_APOPTOSIS, REACTOME\_APOPTOSIS  
REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY\_THROUGH\_PHOSPHORYLATION, REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY\_THROUGH\_PHOSPHORYLATION  
PUJANA\_BREAST\_CANCER\_WITH\_BRCA1\_MUTATED\_UP, PUJANA\_BREAST\_CANCER\_WITH\_BRCA1\_MUTATED\_UP  
REACTOME\_HDR\_THROUGH\_HOMOLOGOUS\_RECOMBINATION\_HRR, REACTOME\_HDR\_THROUGH\_HOMOLOGOUS\_RECOMBINATION\_HRR  
ALONSO\_METASTASIS\_UP, ALONSO\_METASTASIS\_UP  
REACTOME\_CLEC7A\_DECTIN\_1\_SIGNALING, REACTOME\_CLEC7A\_DECTIN\_1\_SIGNALING  
REACTOME\_SCF\_SKP2\_MEDIATED\_DEGRADATION\_OF\_P27\_P21, REACTOME\_SCF\_SKP2\_MEDIATED\_DEGRADATION\_OF\_P27\_P21  
REACTOME\_ASSEMBLY\_OF\_THE\_PRE\_REPLICATIVE\_COMPLEX, REACTOME\_ASSEMBLY\_OF\_THE\_PRE\_REPLICATIVE\_COMPLEX  
RUIZ\_TNC\_TARGETS\_DN, RUIZ\_TNC\_TARGETS\_DN  
MORI\_PLASMA\_CELL\_UP, MORI\_PLASMA\_CELL\_UP  
REACTOME\_REGULATION\_OF\_MRNA\_STABILITY\_BY\_PROTEINS\_THAT\_BIND\_AU\_RICH\_ELEMENTS, REACTOME\_REGULATION\_OF\_MRNA\_STABILITY\_BY\_PROTEINS\_THAT\_BIND\_AU\_RICH\_ELEMENTS  
DITTMER\_PTHLH\_TARGETS\_UP, DITTMER\_PTHLH\_TARGETS\_UP  
REACTOME\_DUAL\_INCISION\_IN\_TC\_NER, REACTOME\_DUAL\_INCISION\_IN\_TC\_NER  
LE\_EGR2\_TARGETS\_UP, LE\_EGR2\_TARGETS\_UP  
REACTOME\_APC\_C\_CDH1\_MEDIATED\_DEGRADATION\_OF\_CDC20\_AND\_OTHER\_APC\_C\_CDH1\_TARGETED\_PROTEINS\_IN\_LATE\_MITOSIS\_EARLY\_G1, REACTOME\_APC\_C\_CDH1\_MEDIATED\_DEGRADATION\_OF\_CDC20\_AND\_OTHER\_APC\_C\_CDH1\_TARGETED\_PROTEINS\_IN\_LATE\_MITOSIS\_EARLY\_G1  
REACTOME\_ANTIGEN\_PROCESSING\_CROSS\_PRESENTATION, REACTOME\_ANTIGEN\_PROCESSING\_CROSS\_PRESENTATION  
PUIFFE\_INVASION\_INHIBITED\_BY\_ASCITES\_UP, PUIFFE\_INVASION\_INHIBITED\_BY\_ASCITES\_UP  
YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_10, YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_10  
REACTOME\_TELOMERE\_C\_STRAND\_LAGGING\_STRAND\_SYNTHESIS, REACTOME\_TELOMERE\_C\_STRAND\_LAGGING\_STRAND\_SYNTHESIS  
REACTOME\_NEGATIVE\_REGULATION\_OF\_NOTCH4\_SIGNALING, REACTOME\_NEGATIVE\_REGULATION\_OF\_NOTCH4\_SIGNALING  
WP\_DNA\_REPLICATION, WP\_DNA\_REPLICATION  
BLALOCK\_ALZHEIMERS\_DISEASE\_INCIPIENT\_DN, BLALOCK\_ALZHEIMERS\_DISEASE\_INCIPIENT\_DN  
REACTOME\_G2\_M\_DNA\_DAMAGE\_CHECKPOINT, REACTOME\_G2\_M\_DNA\_DAMAGE\_CHECKPOINT  
TAKAO\_RESPONSE\_TO\_UVB\_RADIATION\_UP, TAKAO\_RESPONSE\_TO\_UVB\_RADIATION\_UP  
SASAKI\_ADULT\_T\_CELL\_LEUKEMIA, SASAKI\_ADULT\_T\_CELL\_LEUKEMIA  
PID\_PLK1\_PATHWAY, PID\_PLK1\_PATHWAY  
REACTOME\_DNA\_STRAND\_ELONGATION, REACTOME\_DNA\_STRAND\_ELONGATION  
KANG\_DOXORUBICIN\_RESISTANCE\_UP, KANG\_DOXORUBICIN\_RESISTANCE\_UP  
KAMMINGA\_EZH2\_TARGETS, KAMMINGA\_EZH2\_TARGETS  
REACTOME\_SIGNALING\_BY\_NOTCH4, REACTOME\_SIGNALING\_BY\_NOTCH4  
BOYAUUT\_LIVER\_CANCER\_SUBCLASS\_G23\_UP, BOYAUUT\_LIVER\_CANCER\_SUBCLASS\_G23\_UP  
REACTOME\_EXTENSION\_OF\_TELOMERES, REACTOME\_EXTENSION\_OF\_TELOMERES  
REACTOME\_REGULATION\_OF\_HMOX1\_EXPRESSION\_AND\_ACTIVITY, REACTOME\_REGULATION\_OF\_HMOX1\_EXPRESSION\_AND\_ACTIVITY  
REACTOME\_TELOMERE\_MAINTENANCE, REACTOME\_TELOMERE\_MAINTENANCE  
REACTOME\_HDR\_THROUGH\_SINGLE\_STRAND\_ANNHEALING\_SSA, REACTOME\_HDR\_THROUGH\_SINGLE\_STRAND\_ANNHEALING\_SSA  
WP\_G1\_TO\_S\_CELL\_CYCLE\_CONTROL, WP\_G1\_TO\_S\_CELL\_CYCLE\_CONTROL  
REACTOME\_REGULATION\_OF\_RAS\_BY\_GAPS, REACTOME\_REGULATION\_OF\_RAS\_BY\_GAPS  
REACTOME\_DNA\_DAMAGE\_BYPASS, REACTOME\_DNA\_DAMAGE\_BYPASS  
LY\_AGING\_OLD\_DN, LY\_AGING\_OLD\_DN  
KEGG\_DNA\_REPLICATION, KEGG\_DNA\_REPLICATION  
SONG\_TARGETS\_OF\_IJB6\_CMV\_PROTEIN, SONG\_TARGETS\_OF\_IJB6\_CMV\_PROTEIN  
PID\_FANCONI\_PATHWAY, PID\_FANCONI\_PATHWAY  
KEGG\_NUCLEOTIDE\_EXCISION\_REPAIR, KEGG\_NUCLEOTIDE\_EXCISION\_REPAIR  
ISHIDA\_E2F\_TARGETS, ISHIDA\_E2F\_TARGETS  
REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_RUNX3, REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_RUNX3  
REACTOME\_PROTEIN\_UBIQUITINATION, REACTOME\_PROTEIN\_UBIQUITINATION  
REACTOME\_REGULATION\_OF\_PTEIN\_STABILITY\_AND\_ACTIVITY, REACTOME\_REGULATION\_OF\_PTEIN\_STABILITY\_AND\_ACTIVITY  
REACTOME\_REGULATION\_OF\_RUNX3\_EXPRESSION\_AND\_ACTIVITY, REACTOME\_REGULATION\_OF\_RUNX3\_EXPRESSION\_AND\_ACTIVITY  
REACTOME\_ACTIVATION\_OF\_ATR\_IN\_RESPONSE\_TO\_REPLICATION\_STRESS, REACTOME\_ACTIVATION\_OF\_ATR\_IN\_RESPONSE\_TO\_REPLICATION\_STRESS  
REACTOME\_MAPK6\_MAPK4\_SIGNALING, REACTOME\_MAPK6\_MAPK4\_SIGNALING  
REACTOME\_G1\_S\_DNA\_DAMAGE\_CHECKPOINTS, REACTOME\_G1\_S\_DNA\_DAMAGE\_CHECKPOINTS  
REACTOME\_HOMOLOGOUS\_DNA\_PAIRING\_AND\_STRAND\_EXCHANGE, REACTOME\_HOMOLOGOUS\_DNA\_PAIRING\_AND\_STRAND\_EXCHANGE  
WP\_NUCLEOTIDE\_EXCISION\_REPAIR, WP\_NUCLEOTIDE\_EXCISION\_REPAIR  
WP\_PROTEASOME\_DEGRADATION, WP\_PROTEASOME\_DEGRADATION  
REACTOME\_DEGRADATION\_OF\_AXIN, REACTOME\_DEGRADATION\_OF\_AXIN  
REACTOME\_DEGRADATION\_OF\_DVL, REACTOME\_DEGRADATION\_OF\_DVL  
REACTOME\_DECTIN\_1\_MEDIATED\_NONCANONICAL\_NF\_KB\_SIGNALING, REACTOME\_DECTIN\_1\_MEDIATED\_NONCANONICAL\_NF\_KB\_SIGNALING  
REACTOME\_ACTIVATION\_OF\_THE\_PRE\_REPLICATIVE\_COMPLEX, REACTOME\_ACTIVATION\_OF\_THE\_PRE\_REPLICATIVE\_COMPLEX  
LANG\_MYB\_FAMILY\_TARGETS, LANG\_MYB\_FAMILY\_TARGETS  
YAMAZAKI\_TCEB3\_TARGETS\_DN, YAMAZAKI\_TCEB3\_TARGETS\_DN  
WHITFIELD\_CELL\_CYCLE\_LITERATURE, WHITFIELD\_CELL\_CYCLE\_LITERATURE  
REACTOME\_AUF1\_HNRNP\_D0\_BINDS\_AND\_DESTABILIZES\_MRNA, REACTOME\_AUF1\_HNRNP\_D0\_BINDS\_AND\_DESTABILIZES\_MRNA  
REACTOME\_DUAL\_INCISION\_IN\_GG\_NER, REACTOME\_DUAL\_INCISION\_IN\_GG\_NER  
REACTOME\_C\_TYPE\_LECTIN\_RECEPTORS\_CLRS, REACTOME\_C\_TYPE\_LECTIN\_RECEPTORS\_CLRS  
REACTOME\_DEFECTIVE\_CFTR\_CAUSES\_CYSTIC\_FIBROSIS, REACTOME\_DEFECTIVE\_CFTR\_CAUSES\_CYSTIC\_FIBROSIS  
PELLICCIOTTA\_HDAC\_IN\_ANTIEN\_PRESENTATION\_DN, PELLICCIOTTA\_HDAC\_IN\_ANTIEN\_PRESENTATION\_DN  
FURUKAWA\_DUSP6\_TARGETS\_PC15\_DN, FURUKAWA\_DUSP6\_TARGETS\_PC15\_DN  
CAFFAREL\_RESPONSE\_TO\_THC\_DN, CAFFAREL\_RESPONSE\_TO\_THC\_DN  
REACTOME\_POLYMERASE\_SWITCHING\_ON\_THE\_C\_STRAND\_OF\_THE\_TELOMERE, REACTOME\_POLYMERASE\_SWITCHING\_ON\_THE\_C\_STRAND\_OF\_THE\_TELOMERE  
BHATT\_G2M\_ARREST\_BY\_2METHOXYESTRADIOL\_UP, BHATT\_G2M\_ARREST\_BY\_2METHOXYESTRADIOL\_UP  
HONMA\_DOCTAXEL\_RESISTANCE, HONMA\_DOCTAXEL\_RESISTANCE  
ZAMORA\_NOS2\_TARGETS\_UP, ZAMORA\_NOS2\_TARGETS\_UP  
REACTOME\_CROSS\_PRESENTATION\_OF\_SOLUBLE\_EXOGENOUS\_ANTIENS\_ENDOSOMES, REACTOME\_CROSS\_PRESENTATION\_OF\_SOLUBLE\_EXOGENOUS\_ANTIENS\_ENDOSOMES  
WILCOX\_RESPONSE\_TO\_PROGESTERONE\_UP, WILCOX\_RESPONSE\_TO\_PROGESTERONE\_UP  
SCHLOSSER\_MYC\_AND\_SERUM\_RESPONSE\_SYNERGY, SCHLOSSER\_MYC\_AND\_SERUM\_RESPONSE\_SYNERGY  
ZHAN\_MULTIPLE\_MYELOMA\_PR\_UP, ZHAN\_MULTIPLE\_MYELOMA\_PR\_UP  
REACTOME\_PROCESSIVE\_SYNTHESIS\_ON\_THE\_C\_STRAND\_OF\_THE\_TELOMERE, REACTOME\_PROCESSIVE\_SYNTHESIS\_ON\_THE\_C\_STRAND\_OF\_THE\_TELOMERE  
REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_Y\_FAMILY\_DNA\_POLYMERASES\_BYPASSES\_LESIONS\_ON\_DNA\_TEMPLATE, REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_Y\_FAMILY\_DNA\_POLYMERASES\_BYPASSES\_LESIONS\_ON\_DNA\_TEMPLATE  
JOHANSSON\_GLIOMAGENESIS\_BY\_PDGF\_UP, JOHANSSON\_GLIOMAGENESIS\_BY\_PDGF\_UP  
REACTOME\_G1\_S\_SPECIFIC\_TRANSCRIPTION, REACTOME\_G1\_S\_SPECIFIC\_TRANSCRIPTION  
REACTOME\_CELLULAR\_RESPONSE\_TO\_HYPOXIA, REACTOME\_CELLULAR\_RESPONSE\_TO\_HYPOXIA  
PRAMOONJAGO\_SOX4\_TARGETS\_DN, PRAMOONJAGO\_SOX4\_TARGETS\_DN  
REACTOME\_HEDGEHOG\_LIGAND\_BIOGENESIS, REACTOME\_HEDGEHOG\_LIGAND\_BIOGENESIS  
REACTOME\_STABILIZATION\_OF\_P53, REACTOME\_STABILIZATION\_OF\_P53  
YAGI\_AML\_FAB\_MARKERS, YAGI\_AML\_FAB\_MARKERS  
ZHONG\_SECRETOME\_OF\_LUNG\_CANCER\_AND\_FIBROBLAST, ZHONG\_SECRETOME\_OF\_LUNG\_CANCER\_AND\_FIBROBLAST  
KEGG\_MISMATCH\_REPAIR, KEGG\_MISMATCH\_REPAIR  
LANDIS\_ERBB2\_BREAST\_TUMORS\_324\_UP, LANDIS\_ERBB2\_BREAST\_TUMORS\_324\_UP  
WP\_PHOTODYNAMIC\_THERAPYINDUCED\_UNFOLDED\_PROTEIN\_RESPONSE, WP\_PHOTODYNAMIC\_THERAPYINDUCED\_UNFOLDED\_PROTEIN\_RESPONSE  
HU\_ANGIOGENESIS\_DN, HU\_ANGIOGENESIS\_DN  
TARTE\_PLASMA\_CELL\_VS\_B\_LYMPHOCYTE\_UP, TARTE\_PLASMA\_CELL\_VS\_B\_LYMPHOCYTE\_UP  
VANTVEER\_BREAST\_CANCER\_METASTASIS\_DN, VANTVEER\_BREAST\_CANCER\_METASTASIS\_DN  
BURTON\_ADIPOGENESIS\_PEAK\_AT\_16HR, BURTON\_ADIPOGENESIS\_PEAK\_AT\_16HR  
LUL\_THYROID\_CANCER\_CLUSTER\_3, LUL\_THYROID\_CANCER\_CLUSTER\_3  
ZHONG\_SECRETOME\_OF\_LUNG\_CANCER\_AND\_MACROPHAGE, ZHONG\_SECRETOME\_OF\_LUNG\_CANCER\_AND\_MACROPHAGE  
REACTOME\_METABOLISM\_OF\_POLYAMINES, REACTOME\_METABOLISM\_OF\_POLYAMINES  
REACTOME\_TCR\_SIGNALING, REACTOME\_TCR\_SIGNALING  
REACTOME\_RECOGNITION\_OF\_DNA\_DAMAGE\_BY\_PCNA\_CONTAINING\_REPLICATION\_COMPLEX, REACTOME\_RECOGNITION\_OF\_DNA\_DAMAGE\_BY\_PCNA\_CONTAINING\_REPLICATION\_COMPLEX  
REACTOME\_LAGGING\_STRAND\_SYNTHESIS, REACTOME\_LAGGING\_STRAND\_SYNTHESIS  
REACTOME\_MTOR\_SIGNALING, REACTOME\_MTOR\_SIGNALING  
REACTOME\_REGULATION\_OF\_RUNX2\_EXPRESSION\_AND\_ACTIVITY, REACTOME\_REGULATION\_OF\_RUNX2\_EXPRESSION\_AND\_ACTIVITY  
WP\_BASE\_EXCISION\_REPAIR, WP\_BASE\_EXCISION\_REPAIR  
REACTOME\_RESOLUTION\_OF\_ABASIC\_SITES\_AP\_SITES, REACTOME\_RESOLUTION\_OF\_ABASIC\_SITES\_AP\_SITES  
SCIBETTA\_KDMSB\_TARGETS\_DN, SCIBETTA\_KDMSB\_TARGETS\_DN  
KEGG\_BASE\_EXCISION\_REPAIR, KEGG\_BASE\_EXCISION\_REPAIR  
BOYAUUT\_LIVER\_CANCER\_SUBCLASS\_G123\_UP, BOYAUUT\_LIVER\_CANCER\_SUBCLASS\_G123\_UP  
WU\_APOPTOSIS\_BY\_CDKN1A\_VIA\_TP53, WU\_APOPTOSIS\_BY\_CDKN1A\_VIA\_TP53  
KEGG\_PROGESTERONE\_MEDIATED\_OOCYTE\_MATURATION, KEGG\_PROGESTERONE\_MEDIATED\_OOCYTE\_MATURATION  
PID\_P53\_DOWNSTREAM\_PATHWAY, PID\_P53\_DOWNSTREAM\_PATHWAY  
WP\_INTEGRATED\_CANCER\_PATHWAY, WP\_INTEGRATED\_CANCER\_PATHWAY  
STEIN\_ESRRA\_TARGETS\_RESPONSIVE\_TO\_ESTROGEN\_DN, STEIN\_ESRRA\_TARGETS\_RESPONSIVE\_TO\_ESTROGEN\_DN  
REACTOME\_PCP\_CE\_PATHWAY, REACTOME\_PCP\_CE\_PATHWAY  
REACTOME\_DEGRADATION\_OF\_GLI1\_BY\_THE\_PROTEASOME, REACTOME\_DEGRADATION\_OF\_GLI1\_BY\_THE\_PROTEASOME  
GAVIN\_FOXP3\_TARGETS\_CLUSTER\_P6, GAVIN\_FOXP3\_TARGETS\_CLUSTER\_P6  
REACTOME\_BETA\_CATENIN\_INDEPENDENT\_WNT\_SIGNALING, REACTOME\_BETA\_CATENIN\_INDEPENDENT\_WNT\_SIGNALING  
REACTOME\_PROCESSIVE\_SYNTHESIS\_ON\_THE\_LAGGING\_STRAND, REACTOME\_PROCESSIVE\_SYNTHESIS\_ON\_THE\_LAGGING\_STRAND  
CHOW\_RASSF1\_TARGETS\_DN, CHOW\_RASSF1\_TARGETS\_DN  
REACTOME\_GAP\_FILLING\_DNA\_REPAIR\_SYNTHESIS\_AND\_LIGATION\_IN\_GG\_NER, REACTOME\_GAP\_FILLING\_DNA\_REPAIR\_SYNTHESIS\_AND\_LIGATION\_IN\_GG\_NER  
WP\_PARKINUBIQUITIN\_PROTEASOMAL\_SYSTEM\_PATHWAY, WP\_PARKINUBIQUITIN\_PROTEASOMAL\_SYSTEM\_PATHWAY  
POMEROY\_MEDULLOBLASTOMA\_PROGNOSIS\_DN, POMEROY\_MEDULLOBLASTOMA\_PROGNOSIS\_DN  
REACTOME\_TERMINATION\_OF\_TRANSLESION\_DNA\_SYNTHESIS, REACTOME\_TERMINATION\_OF\_TRANSLESION\_DNA\_SYNTHESIS  
WP\_DNA\_MISMATCH\_REPAIR, WP\_DNA\_MISMATCH\_REPAIR  
REACTOME\_THE\_ROLE\_OF\_GTS1\_IN\_G2\_M\_PROGRESSION\_AFTER\_G2\_CHECKPOINT, REACTOME\_THE\_ROLE\_OF\_GTS1\_IN\_G2\_M\_PROGRESSION\_AFTER\_G2\_CHECKPOINT  
GREENBAUM\_E2A\_TARGETS\_UP, GREENBAUM\_E2A\_TARGETS\_UP  
REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_POLK, REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_POLK  
REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_POLH, REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_POLH  
PID\_CMYB\_PATHWAY, PID\_CMYB\_PATHWAY  
REACTOME\_MISMATCH\_REPAIR, REACTOME\_MISMATCH\_REPAIR  
CAIRO\_PML\_TARGETS\_BOUND\_BY\_MYC\_UP, CAIRO\_PML\_TARGETS\_BOUND\_BY\_MYC\_UP  
REACTOME\_SIGNALING\_BY\_HEDGEHOG, REACTOME\_SIGNALING\_BY\_HEDGEHOG  
WIELAND\_UP\_BY\_HBV\_INFECTION, WIELAND\_UP\_BY\_HBV\_INFECTION  
WP\_GASTRIC\_CANCER\_NETWORK\_2, WP\_GASTRIC\_CANCER\_NETWORK\_2  
KEGG\_P53\_SIGNALING\_PATHWAY, KEGG\_P53\_SIGNALING\_PATHWAY  
REACTOME\_BASE\_EXCISION\_REPAIR, REACTOME\_BASE\_EXCISION\_REPAIR  
PANGAS\_TUMOR\_SUPPRESSION\_BY\_SMAD1\_AND\_SMAD5\_DN, PANGAS\_TUMOR\_SUPPRESSION\_BY\_SMAD1\_AND\_SMAD5\_DN  
PID\_P73PATHWAY, PID\_P73PATHWAY  
REACTOME\_ABC\_FAMILY\_PROTEINS\_MEDIATED\_TRANSPORT, REACTOME\_ABC\_FAMILY\_PROTEINS\_MEDIATED\_TRANSPORT  
REACTOME\_RESOLUTION\_OF\_AP\_SITES\_VIA\_THE\_MULTIPLE\_NUCLEOTIDE\_PATCH\_REPLACEMENT\_PATHWAY, REACTOME\_RESOLUTION\_OF\_AP\_SITES\_VIA\_THE\_MULTIPLE\_NUCLEOTIDE\_PATCH\_REPLACEMENT\_PATHWAY  
KEGG\_N\_GLYCAN\_BIOSYNTHESIS, KEGG\_N\_GLYCAN\_BIOSYNTHESIS  
REACTOME\_ASYMMETRIC\_LOCALIZATION\_OF\_PCP\_PROTEINS, REACTOME\_ASYMMETRIC\_LOCALIZATION\_OF\_PCP\_PROTEINS  
KEGG\_PROTEASOME, KEGG\_PROTEASOME  
REACTOME\_GOLGI\_CISTERNAE\_PERICENTRIOLAR\_STACK\_REORGANIZATION, REACTOME\_GOLGI\_CISTERNAE\_PERICENTRIOLAR\_STACK\_REORGANIZATION  
REACTOME\_ABC\_TRANSPORTER\_DISORDERS, REACTOME\_ABC\_TRANSPORTER\_DISORDERS  
HAHTOLA\_MYCOSIS\_FUNGOIDES\_SKIN\_DN, HAHTOLA\_MYCOSIS\_FUNGOIDES\_SKIN\_DN  
KEGG\_OTHER\_GLYCAN\_DEGRADATION, KEGG\_OTHER\_GLYCAN\_DEGRADATION  
REACTOME\_RUNX1\_REGULATES\_TRANSCRIPTION\_OF\_GENES\_INVOLVED\_IN\_DIFFERENTIATION\_OF\_HSCS, REACTOME\_RUNX1\_REGULATES\_TRANSCRIPTION\_OF\_GENES\_INVOLVED\_IN\_DIFFERENTIATION\_OF\_HSCS  
IWANAGA\_E2F1\_TARGETS\_INDUCED\_BY\_SERUM, IWANAGA\_E2F1\_TARGETS\_INDUCED\_BY\_SERUM  
WP\_COR1\_CYCLE, WP\_COR1\_CYCLE  
KALMA\_E2F1\_TARGETS, KALMA\_E2F1\_TARGETS  
REACTOME\_CONDENSATION\_OF\_PROMETAPHASE\_CHROMOSOMES, REACTOME\_CONDENSATION\_OF\_PROMETAPHASE\_CHROMOSOMES  
CAFFAREL\_RESPONSE\_TO\_THC\_8HR\_5\_DN, CAFFAREL\_RESPONSE\_TO\_THC\_8HR\_5\_DN  
LU\_AGING\_BRAIN\_DN, LU\_AGING\_BRAIN\_DN  
PID\_FOXM1\_PATHWAY, PID\_FOXM1\_PATHWAY  
KOKKINAKIS METHIONINE\_DEPRIVATION\_48HR\_UP, KOKKINAKIS METHIONINE\_DEPRIVATION\_48HR\_UP  
FINETTI\_BREAST\_CANCER\_KINOME\_RED, FINETTI\_BREAST\_CANCER\_KINOME\_RED  
REACTOME\_HEDGEHOG\_OFF\_STATE, REACTOME\_HEDGEHOG\_OFF\_STATE  
REACTOME\_PCNA\_DEPENDENT\_LONG\_PATCH\_BASE\_EXCISION\_REPAIR, REACTOME\_PCNA\_DEPENDENT\_LONG\_PATCH\_BASE\_EXCISION\_REPAIR  
BIOCARTA\_AKAPCENTROSOME\_PATHWAY, BIOCARTA\_AKAPCENTROSOME\_PATHWAY  
MARTINEZ\_RESPONSE\_TO TRABECTEDIN\_UP, MARTINEZ\_RESPONSE\_TO TRABECTEDIN\_UP  
REACTOME\_ENERGY\_DEPENDENT\_REGULATION\_OF\_MTOR\_BY\_LKB1\_AMPK, REACTOME\_ENERGY\_DEPENDENT\_REGULATION\_OF\_MTOR\_BY\_LKB1\_AMPK  
REACTOME\_TNFR2\_NON\_CANONICAL\_NF\_KB\_PATHWAY, REACTOME\_TNFR2\_NON\_CANONICAL\_NF\_KB\_PATHWAY  
JIANG\_AGING\_CEREBRAL\_CORTX\_DN, JIANG\_AGING\_CEREBRAL\_CORTX\_DN  
BIOCARTA\_CELL\_CYCLE\_PATHWAY, BIOCARTA\_CELL\_CYCLE\_PATHWAY  
VISALA\_RESPONSE\_TO\_HEAT\_SHOCK\_AND\_AGING\_DN, VISALA\_RESPONSE\_TO\_HEAT\_SHOCK\_AND\_AGING\_DN  
YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_12, YAO\_TEMPORAL\_RESPONSE\_TO\_PROGESTERONE\_CLUSTER\_12  
BIOCARTA\_P53\_PATHWAY, BIOCARTA\_P53\_PATHWAY  
MINGUEZ\_LIVER\_CANCER\_VASCULAR\_INVASION\_UP, MINGUEZ\_LIVER\_CANCER\_VASCULAR\_INVASION\_UP  
BAE\_BRCA1\_TARGETS\_UP, BAE\_BRCA1\_TARGETS\_UP  
REACTOME\_RHOBTB2\_GTPASE\_CYCLE, REACTOME\_RHOBTB2\_GTPASE\_CYCLE  
REACTOME\_POLYMERASE\_SWITCHING, REACTOME\_POLYMERASE\_SWITCHING  
BIOCARTA\_PROTEASOME\_PATHWAY, BIOCARTA\_PROTEASOME\_PATHWAY  
REACTOME\_INITIATION\_OF\_NUCLEAR\_ENVELOPE\_NE\_REFORMATION, REACTOME\_INITIATION\_OF\_NUCLEAR\_ENVELOPE\_NE\_REFORMATION  
DARKEE\_CANCER\_PRONE\_RESPONSE\_BPA, DARKEE\_CANCER\_PRONE\_RESPONSE\_BPA  
SHIPP\_DLBC1\_CURED\_VS\_FATAL\_DN, SHIPP\_DLBC1\_CURED\_VS\_FATAL\_DN  
NADLER\_HYPERGLYCEMIA\_AT\_OBESITY, NADLER\_HYPERGLYCEMIA\_AT\_OBESITY  
TANG\_SENESCENCE\_TP53\_TARGETS\_DN, TANG\_SENESCENCE\_TP53\_TARGETS\_DN  
REACTOME\_HEDGEHOG\_ON\_STATE, REACTOME\_HEDGEHOG\_ON\_STATE  
MEINHOLD\_OVARIAN\_CANCER\_LOW\_GRADE\_DN, MEINHOLD\_OVARIAN\_CANCER\_LOW\_GRADE\_DN  
SWEET\_KRAS\_ONCOGENIC\_SIGNATURE, SWEET\_KRAS\_ONCOGENIC\_SIGNATURE  
DELLA\_RESPONSE\_TO\_TSA\_AND\_BUTYRATE, DELLA\_RESPONSE\_TO\_TSA\_AND\_BUTYRATE  
YU\_BAP1\_TARGETS, YU\_BAP1\_TARGETS  
MEISSNER\_NPC\_ICP\_WITH\_H3K4ME3, MEISSNER\_NPC\_ICP\_WITH\_H3K4ME3