

CHIANG\_LIVER\_CANCER.SUBCLASS.UNANNOTATED\_DN, CHIANG\_LIVER\_CANCER.SUBCLASS.UNANNOTATED\_DN  
WINNEPENNINCKX.MELANOMA.METASTASIS\_UP, WINNEPENNINCKX.MELANOMA.METASTASIS\_UP  
ROSTY\_CERVICAL\_CANCER.PROLIFERATION.CLUSTER, ROSTY\_CERVICAL\_CANCER.PROLIFERATION.CLUSTER  
BENPORATH.PROLIFERATION, BENPORATH.PROLIFERATION  
PYEON\_CANCER\_HEAD\_AND\_NECK\_VS\_CERVICAL\_UP, PYEON\_CANCER\_HEAD\_AND\_NECK\_VS\_CERVICAL\_UP  
FUJII\_YBI\_TARGETS\_DN, FUJII\_YBI\_TARGETS\_DN  
REACTOME\_DNA\_REPLICATION, REACTOME\_DNA\_REPLICATION  
FLORIO\_NEOCORTEX\_BASAL\_RADIAL\_GLIA\_DN, FLORIO\_NEOCORTEX\_BASAL\_RADIAL\_GLIA\_DN  
HOFFMANN\_LARGE\_TO\_SMALL\_PRE\_BII\_LYMPHOCYTE\_UP, HOFFMANN\_LARGE\_TO\_SMALL\_PRE\_BII\_LYMPHOCYTE\_UP  
REACTOME\_MITOTIC\_SPINDLE\_CHECKPOINT, REACTOME\_MITOTIC\_SPINDLE\_CHECKPOINT  
ZHOU\_CELL\_CYCLE\_GENES\_IN\_IR\_RESPONSE\_24HR, ZHOU\_CELL\_CYCLE\_GENES\_IN\_IR\_RESPONSE\_24HR  
REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY, REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY  
MORI\_IMMATURE\_B\_LYMPHOCYTE\_DN, MORI\_IMMATURE\_B\_LYMPHOCYTE\_DN  
WP\_DNA\_REPAIR\_PATHWAYS\_FULL\_NETWORK, WP\_DNA\_REPAIR\_PATHWAYS\_FULL\_NETWORK  
REACTOME\_SEPARATION\_OF\_SISTER\_CHROMATIDS, REACTOME\_SEPARATION\_OF\_SISTER\_CHROMATIDS  
WHITFIELD\_CELL\_CYCLE\_G2\_M, WHITFIELD\_CELL\_CYCLE\_G2\_M  
FERREIRA\_EWINGS\_SARCOMA\_UNSTABLE\_VS\_STABLE\_UP, FERREIRA\_EWINGS\_SARCOMA\_UNSTABLE\_VS\_STABLE\_UP  
REACTOME\_MITOTIC\_G2\_G2\_M\_PHASES, REACTOME\_MITOTIC\_G2\_G2\_M\_PHASES  
WHITFIELD\_CELL\_CYCLE\_G2, WHITFIELD\_CELL\_CYCLE\_G2  
CHIANG\_LIVER\_CANCER.SUBCLASS.PROLIFERATION\_UP, CHIANG\_LIVER\_CANCER.SUBCLASS.PROLIFERATION\_UP  
REACTOME\_G2\_M\_CHECKPOINTS, REACTOME\_G2\_M\_CHECKPOINTS  
ZHOU\_CELL\_CYCLE\_GENES\_IN\_IR\_RESPONSE\_6HR, ZHOU\_CELL\_CYCLE\_GENES\_IN\_IR\_RESPONSE\_6HR  
REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY\_THROUGH\_PHOSPHORYLATION, REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY\_THROUGH\_PHOSPHORYLATION  
GRAHAM\_CML\_DIVIDING\_VS\_NORMAL\_QUIESCENT\_UP, GRAHAM\_CML\_DIVIDING\_VS\_NORMAL\_QUIESCENT\_UP  
BLANCO\_MELO\_BRONCHIAL\_EPITHELIAL\_CELLS\_INFLUENZA\_A\_DEL\_NSI\_INFECTION\_DN, BLANCO\_MELO\_BRONCHIAL\_EPITHELIAL\_CELLS\_INFLUENZA\_A\_DEL\_NSI\_INFECTION\_DN  
DAZARD\_UV\_RESPONSE\_CLUSTER\_G6, DAZARD\_UV\_RESPONSE\_CLUSTER\_G6  
LEE\_EARLY\_T\_LYMPHOCYTE\_UP, LEE\_EARLY\_T\_LYMPHOCYTE\_UP  
WP\_DNA\_IRDAMAGE\_AND\_CELLULAR\_RESPONSE\_VIA\_ATR, WP\_DNA\_IRDAMAGE\_AND\_CELLULAR\_RESPONSE\_VIA\_ATR  
PYEON\_HPV\_POSITIVE\_TUMORS\_UP, PYEON\_HPV\_POSITIVE\_TUMORS\_UP  
WHITFIELD\_CELL\_CYCLE\_S, WHITFIELD\_CELL\_CYCLE\_S  
PUJANA\_BREAST\_CANCER\_LIT\_INT\_NETWORK, PUJANA\_BREAST\_CANCER\_LIT\_INT\_NETWORK  
PID\_FANCONI\_PATHWAY, PID\_FANCONI\_PATHWAY  
VILLANUEVA\_LIVER\_CANCER\_KRT19\_UP, VILLANUEVA\_LIVER\_CANCER\_KRT19\_UP  
KONG\_E2F3\_TARGETS, KONG\_E2F3\_TARGETS  
REACTOME\_RESOLUTION\_OF\_SISTER\_CHROMATID\_COHESION, REACTOME\_RESOLUTION\_OF\_SISTER\_CHROMATID\_COHESION  
WP\_RETINOBLASTOMA\_GENE\_IN\_CANCER, WP\_RETINOBLASTOMA\_GENE\_IN\_CANCER  
REACTOME\_DNA\_DOUBLE\_STRAND\_BREAK\_REPAIR, REACTOME\_DNA\_DOUBLE\_STRAND\_BREAK\_REPAIR  
REACTOME\_CELLULAR\_SENESCENCE, REACTOME\_CELLULAR\_SENESCENCE  
CROONQUIST\_IL6\_DEPRIVATION\_DN, CROONQUIST\_IL6\_DEPRIVATION\_DN  
WHITFIELD\_CELL\_CYCLE\_M\_G1, WHITFIELD\_CELL\_CYCLE\_M\_G1  
KEGG\_CELL\_CYCLE\_KEGG\_CELL\_CYCLE  
REACTOME\_REGULATION\_OF\_PLK1\_ACTIVITY\_AT\_G2\_M\_TRANSITION, REACTOME\_REGULATION\_OF\_PLK1\_ACTIVITY\_AT\_G2\_M\_TRANSITION  
GARCIA\_TARGETS\_OF\_FLII\_AND\_DAXI\_DN, GARCIA\_TARGETS\_OF\_FLII\_AND\_DAXI\_DN  
FISCHER\_G1\_S\_CELL\_CYCLE, FISCHER\_G1\_S\_CELL\_CYCLE  
REACTOME\_HDR\_THROUGH\_HOMOLOGOUS\_RECOMBINATION\_HRR, REACTOME\_HDR\_THROUGH\_HOMOLOGOUS\_RECOMBINATION\_HRR  
REACTOME\_RHO\_GTPASES\_ACTIVATE\_FORMINS, REACTOME\_RHO\_GTPASES\_ACTIVATE\_FORMINS  
REACTOME\_HOMOLOGY\_DIRECTED\_REPAIR, REACTOME\_HOMOLOGY\_DIRECTED\_REPAIR  
GRAHAM\_NORMAL\_QUIESCENT\_VS\_NORMAL\_DIVIDING\_DN, GRAHAM\_NORMAL\_QUIESCENT\_VS\_NORMAL\_DIVIDING\_DN  
WP\_CELL\_CYCLE, WP\_CELL\_CYCLE  
BURTON\_ADIPOGENESIS\_3, BURTON\_ADIPOGENESIS\_3  
WHITEFORD\_PEDIATRIC\_CANCER\_MARKERS, WHITEFORD\_PEDIATRIC\_CANCER\_MARKERS  
WP\_G1\_TO\_S\_CELL\_CYCLE\_CONTROL, WP\_G1\_TO\_S\_CELL\_CYCLE\_CONTROL  
SARRIO\_EPITHELIAL\_MESENCHYMAL\_TRANSITION\_UP, SARRIO\_EPITHELIAL\_MESENCHYMAL\_TRANSITION\_UP  
BIOCARTA\_HIVNEF\_PATHWAY, BIOCARTA\_HIVNEF\_PATHWAY  
WP\_DNA\_DAMAGE\_RESPONSE, WP\_DNA\_DAMAGE\_RESPONSE  
REACTOME\_DNA\_DAMAGE\_TELOMERE\_STRESS\_INDUCED\_SENESCENCE, REACTOME\_DNA\_DAMAGE\_TELOMERE\_STRESS\_INDUCED\_SENESCENCE  
WP\_DNA\_REPLICATION, WP\_DNA\_REPLICATION  
WELCSH\_BRCA1\_TARGETS\_UP, WELCSH\_BRCA1\_TARGETS\_UP  
WP\_INTEGRATED\_BREAST\_CANCER\_PATHWAY, WP\_INTEGRATED\_BREAST\_CANCER\_PATHWAY  
WU\_APOPTOSIS\_BY\_CDKN1A\_VIA\_TP53, WU\_APOPTOSIS\_BY\_CDKN1A\_VIA\_TP53  
KAUFFMANN\_DNA\_REPLICATION\_GENES, KAUFFMANN\_DNA\_REPLICATION\_GENES  
ZHAN\_MULTIPLE\_MYELOMA\_PR\_UP, ZHAN\_MULTIPLE\_MYELOMA\_PR\_UP  
VANTVEER\_BREAST\_CANCER\_METASTASIS\_DN, VANTVEER\_BREAST\_CANCER\_METASTASIS\_DN  
REACTOME\_AURKA\_ACTIVATION\_BY\_TPX2, REACTOME\_AURKA\_ACTIVATION\_BY\_TPX2  
CROONQUIST\_NRAS\_SIGNALING\_DN, CROONQUIST\_NRAS\_SIGNALING\_DN  
WHITFIELD\_CELL\_CYCLE\_LITERATURE, WHITFIELD\_CELL\_CYCLE\_LITERATURE  
VERNELL\_RETINOBLASTOMA\_PATHWAY\_UP, VERNELL\_RETINOBLASTOMA\_PATHWAY\_UP  
CROONQUIST\_NRAS\_VS\_STROMAL\_STIMULATION\_DN, CROONQUIST\_NRAS\_VS\_STROMAL\_STIMULATION\_DN  
REACTOME\_BASE\_EXCISION\_REPAIR, REACTOME\_BASE\_EXCISION\_REPAIR  
REACTOME\_MEIOSIS, REACTOME\_MEIOSIS  
ALCALA\_APOPTOSIS, ALCALA\_APOPTOSIS  
KAUFFMANN\_MELANOMA\_RELAPSE\_UP, KAUFFMANN\_MELANOMA\_RELAPSE\_UP  
REACTOME\_ACTIVATION\_OF\_ATR\_IN\_RESPONSE\_TO\_REPLICATION\_STRESS, REACTOME\_ACTIVATION\_OF\_ATR\_IN\_RESPONSE\_TO\_REPLICATION\_STRESS  
REACTOME\_HOMOLOGOUS\_DNA\_PAIRING\_AND\_STRAND\_EXCHANGE, REACTOME\_HOMOLOGOUS\_DNA\_PAIRING\_AND\_STRAND\_EXCHANGE  
WHITFIELD\_CELL\_CYCLE\_G1\_S, WHITFIELD\_CELL\_CYCLE\_G1\_S  
KANG\_DOXORUBICIN\_RESISTANCE\_UP, KANG\_DOXORUBICIN\_RESISTANCE\_UP  
REACTOME\_DNA\_STRAND\_ELONGATION, REACTOME\_DNA\_STRAND\_ELONGATION  
REACTOME\_EXTENSION\_OF\_TELOMERES, REACTOME\_EXTENSION\_OF\_TELOMERES  
HAHTOLA\_SEZARY\_SYNDROM\_UP, HAHTOLA\_SEZARY\_SYNDROM\_UP  
BOYAULT\_LIVER\_CANCER.SUBCLASS\_G123\_UP, BOYAULT\_LIVER\_CANCER.SUBCLASS\_G123\_UP  
REACTOME\_CONDENSATION\_OF\_PROPHASE\_CHROMOSOMES, REACTOME\_CONDENSATION\_OF\_PROPHASE\_CHROMOSOMES  
WP\_DNA\_IRDOUBLE\_STRAND\_BREAKS\_DSBS\_AND\_CELLULAR\_RESPONSE\_VIA\_ATM, WP\_DNA\_IRDOUBLE\_STRAND\_BREAKS\_DSBS\_AND\_CELLULAR\_RESPONSE\_VIA\_ATM  
RUIZ\_TNC\_TARGETS\_DN, RUIZ\_TNC\_TARGETS\_DN  
ISHIDA\_E2F\_TARGETS, ISHIDA\_E2F\_TARGETS  
SONG\_TARGETS\_OF\_IE86\_CMV\_PROTEIN, SONG\_TARGETS\_OF\_IE86\_CMV\_PROTEIN  
DE\_YY1\_TARGETS\_DN, DE\_YY1\_TARGETS\_DN  
GEORGES\_CELL\_CYCLE\_MIR192\_TARGETS, GEORGES\_CELL\_CYCLE\_MIR192\_TARGETS  
REN\_BOUND\_BY\_E2F, REN\_BOUND\_BY\_E2F  
REACTOME\_SIGNALING\_BY\_TGF\_BETA\_RECEPTOR\_COMPLEX, REACTOME\_SIGNALING\_BY\_TGF\_BETA\_RECEPTOR\_COMPLEX  
YAGL\_AML\_FAB\_MARKERS, YAGL\_AML\_FAB\_MARKERS  
REACTOME\_RESOLUTION\_OF\_ABASIC\_SITES\_AP\_SITES, REACTOME\_RESOLUTION\_OF\_ABASIC\_SITES\_AP\_SITES  
REACTOME\_DNA\_DAMAGE\_BYPASS, REACTOME\_DNA\_DAMAGE\_BYPASS  
REACTOME\_MEIOTIC\_SYNAPSIS, REACTOME\_MEIOTIC\_SYNAPSIS  
DAZARD\_RESPONSE\_TO\_UV\_SCC\_DN, DAZARD\_RESPONSE\_TO\_UV\_SCC\_DN  
JL\_RESPONSE\_TO\_FSH\_DN, JL\_RESPONSE\_TO\_FSH\_DN  
DITTMER\_PTHLH\_TARGETS\_UP, DITTMER\_PTHLH\_TARGETS\_UP  
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  
ALCALAY\_AML\_BY\_NPM1\_LOCALIZATION\_DN, ALCALAY\_AML\_BY\_NPM1\_LOCALIZATION\_DN  
REACTOME\_MEIOTIC\_RECOMBINATION, REACTOME\_MEIOTIC\_RECOMBINATION  
MOLENAAR\_TARGETS\_OF\_CCNDA\_AND\_CDK4\_DN, MOLENAAR\_TARGETS\_OF\_CCNDA\_AND\_CDK4\_DN  
JOHANSSON\_GLOMAGENESIS\_BY\_PDCFB\_UP, JOHANSSON\_GLOMAGENESIS\_BY\_PDCFB\_UP  
MARIADASON\_RESPONSE\_TO\_BUTYRATE\_SULINDAC\_6, MARIADASON\_RESPONSE\_TO\_BUTYRATE\_SULINDAC\_6  
REACTOME\_DISEASES\_OF\_PROGRAMMED\_CELL\_DEATH, REACTOME\_DISEASES\_OF\_PROGRAMMED\_CELL\_DEATH  
PID\_ATR\_PATHWAY, PID\_ATR\_PATHWAY  
PID\_PLK1\_PATHWAY, PID\_PLK1\_PATHWAY  
TSAL\_RESPONSE\_TO\_IONIZING\_RADIATION, TSAL\_RESPONSE\_TO\_IONIZING\_RADIATION  
REACTOME\_PRC2\_METHYLATES\_HISTONES\_AND\_DNA, REACTOME\_PRC2\_METHYLATES\_HISTONES\_AND\_DNA  
ZAMORA\_NOS2\_TARGETS\_UP, ZAMORA\_NOS2\_TARGETS\_UP  
KEGG\_DNA\_REPLICATION, KEGG\_DNA\_REPLICATION  
WAKASUGI\_HAVE\_ZNF143\_BINDING\_SITES, WAKASUGI\_HAVE\_ZNF143\_BINDING\_SITES  
LAU\_APOPTOSIS\_CDKN2A\_UP, LAU\_APOPTOSIS\_CDKN2A\_UP  
PUJANA\_BREAST\_CANCER\_WITH\_BRCA1\_MUTATED\_UP, PUJANA\_BREAST\_CANCER\_WITH\_BRCA1\_MUTATED\_UP  
RIZ\_ERYTHROID\_DIFFERENTIATION, RIZ\_ERYTHROID\_DIFFERENTIATION  
CONCANNON\_APOPTOSIS\_BY\_EPOXOMICIN\_DN, CONCANNON\_APOPTOSIS\_BY\_EPOXOMICIN\_DN  
PID\_P53\_DOWNSTREAM\_PATHWAY, PID\_P53\_DOWNSTREAM\_PATHWAY  
KEGG\_OOCYTE\_MEIOSIS, KEGG\_OOCYTE\_MEIOSIS  
GRAHAM\_CML\_QUIESCENT\_VS\_NORMAL\_QUIESCENT\_UP, GRAHAM\_CML\_QUIESCENT\_VS\_NORMAL\_QUIESCENT\_UP  
SHAFFER\_IRF4\_TARGETS\_IN\_ACTIVATED\_DENDRITIC\_CELL, SHAFFER\_IRF4\_TARGETS\_IN\_ACTIVATED\_DENDRITIC\_CELL  
GENTILE\_RESPONSE\_CLUSTER\_D3, GENTILE\_RESPONSE\_CLUSTER\_D3  
REACTOME\_OXIDATIVE\_STRESS\_INDUCED\_SENESCENCE, REACTOME\_OXIDATIVE\_STRESS\_INDUCED\_SENESCENCE  
FARMER\_BREAST\_CANCER\_CLUSTER\_2, FARMER\_BREAST\_CANCER\_CLUSTER\_2  
REACTOME\_REPRODUCTION, REACTOME\_REPRODUCTION  
BROWNE\_HCMV\_INFECTION\_18HR\_UP, BROWNE\_HCMV\_INFECTION\_18HR\_UP  
WP\_ATM\_SIGNALING\_PATHWAY, WP\_ATM\_SIGNALING\_PATHWAY  
REACTOME\_PROCESSING\_OF\_DNA\_DOUBLE\_STRAND\_BREAK\_ENDS, REACTOME\_PROCESSING\_OF\_DNA\_DOUBLE\_STRAND\_BREAK\_ENDS  
MUELLER\_COMMON\_X\_TARGETS\_OF\_AML\_FUSIONS\_UP, MUELLER\_COMMON\_TARGETS\_OF\_AML\_FUSIONS\_UP  
YU\_BAP1\_TARGETS, YU\_BAP1\_TARGETS  
REICHERT\_MITOSIS\_LIN9\_TARGETS, REICHERT\_MITOSIS\_LIN9\_TARGETS  
REACTOME\_G2\_M\_DNA\_DAMAGE\_CHECKPOINT, REACTOME\_G2\_M\_DNA\_DAMAGE\_CHECKPOINT  
DORMOY\_ELAVL1\_TARGETS, DORMOY\_ELAVL1\_TARGETS  
BOYAULT\_LIVER\_CANCER.SUBCLASS\_G23\_UP, BOYAULT\_LIVER\_CANCER.SUBCLASS\_G23\_UP  
REACTOME\_DEPOSITION\_OF\_NEW\_CENPA\_CONTAINING\_NUCLEOSOMES\_AT\_THE\_CENTROMERE, REACTOME\_DEPOSITION\_OF\_NEW\_CENPA\_CONTAINING\_NUCLEOSOMES\_AT\_THE\_CENTROMERE  
ODONNELL\_TARGETS\_OF\_MYC\_AND\_TFRC\_DN, ODONNELL\_TARGETS\_OF\_MYC\_AND\_TFRC\_DN  
BIOCARTA\_ATRBRCA1\_PATHWAY, BIOCARTA\_ATRBRCA1\_PATHWAY  
KEGG\_NUCLEOTIDE\_EXCISION\_REPAIR, KEGG\_NUCLEOTIDE\_EXCISION\_REPAIR  
REACTOME\_TP53\_REGULATES\_TRANSCRIPTION\_OF\_CELL\_CYCLE\_GENES, REACTOME\_TP53\_REGULATES\_TRANSCRIPTION\_OF\_CELL\_CYCLE\_GENES  
REACTOME\_GAP\_FILLING\_DNA\_REPAIR\_SYNTHESIS\_AND\_LIGATION\_IN\_GG\_NER, REACTOME\_GAP\_FILLING\_DNA\_REPAIR\_SYNTHESIS\_AND\_LIGATION\_IN\_GG\_NER  
REACTOME\_DUAL\_INCISION\_IN\_GG\_NER, REACTOME\_DUAL\_INCISION\_IN\_GG\_NER  
WP\_SIGNALING\_PATHWAYS\_IN\_GLOBLASTOMA, WP\_SIGNALING\_PATHWAYS\_IN\_GLOBLASTOMA  
WP\_NUCLEOTIDE\_EXCISION\_REPAIR, WP\_NUCLEOTIDE\_EXCISION\_REPAIR  
REACTOME\_ACTIVATION\_OF\_THE\_PRE\_REPLICATIVE\_COMPLEX, REACTOME\_ACTIVATION\_OF\_THE\_PRE\_REPLICATIVE\_COMPLEX  
SASAKI\_ADULT\_T\_CELL\_LEUKEMIA, SASAKI\_ADULT\_T\_CELL\_LEUKEMIA  
PEARL\_HDAC\_PROLIFERATION\_CLUSTER\_DN, PEARL\_HDAC\_PROLIFERATION\_CLUSTER\_DN  
PID\_ATM\_PATHWAY, PID\_ATM\_PATHWAY  
LY\_AGING\_OLD\_DN, LY\_AGING\_OLD\_DN  
PASQUALUCC1\_LYMPHOMA\_BY\_GC\_STAGE\_DN, PASQUALUCC1\_LYMPHOMA\_BY\_GC\_STAGE\_DN  
MARZEC\_IL2\_SIGNALING\_DN, MARZEC\_IL2\_SIGNALING\_DN  
REACTOME\_TERMINATION\_OF\_TRANSLESION\_DNA\_SYNTHESIS, REACTOME\_TERMINATION\_OF\_TRANSLESION\_DNA\_SYNTHESIS  
LIU\_VMYB\_TARGETS\_UP, LIU\_VMYB\_TARGETS\_UP  
REACTOME\_HDR\_THROUGH\_SINGLE\_STRAND\_ANNHEALING\_SSA, REACTOME\_HDR\_THROUGH\_SINGLE\_STRAND\_ANNHEALING\_SSA  
WP\_TRANSULFURATION\_AND\_ONE\_CARBON\_METABOLISM, WP\_TRANSULFURATION\_AND\_ONE\_CARBON\_METABOLISM  
REACTOME\_TELOMERE\_C\_STRAND\_LAGGING\_STRAND\_SYNTHESIS, REACTOME\_TELOMERE\_C\_STRAND\_LAGGING\_STRAND\_SYNTHESIS  
REACTOME\_RESOLUTION\_OF\_D\_LOOP\_STRUCTURES\_THROUGH\_SYNTHESIS\_DEPENDENT\_STRAND\_ANNHEALING\_SDSA, REACTOME\_RESOLUTION\_OF\_D\_LOOP\_STRUCTURES\_THROUGH\_SYNTHESIS\_DEPENDENT\_STRAND\_ANNHEALING\_SDSA  
GALE\_API\_WITH\_FLT3\_MUTATED\_UP, GALE\_API\_WITH\_FLT3\_MUTATED\_UP  
WP\_INTEGRATED\_CANCER\_PATHWAY, WP\_INTEGRATED\_CANCER\_PATHWAY  
REACTOME\_CYCLIN\_D\_ASSOCIATED\_EVENTS\_IN\_G1, REACTOME\_CYCLIN\_D\_ASSOCIATED\_EVENTS\_IN\_G1  
REACTOME\_RHOD\_GTPASE\_CYCLE, REACTOME\_RHOD\_GTPASE\_CYCLE  
FINETTL\_BREAST\_CANCER\_KINOME\_RED, FINETTL\_BREAST\_CANCER\_KINOME\_RED  
REACTOME\_RECRUITMENT\_OF\_NUMA\_TO\_MITOTIC\_CENTROSOMES, REACTOME\_RECRUITMENT\_OF\_NUMA\_TO\_MITOTIC\_CENTROSOMES  
SCHIBETTA\_KDM5B\_TARGETS\_DN, SCHIBETTA\_KDM5B\_TARGETS\_DN  
CROMER\_METASTASIS\_UP, CROMER\_METASTASIS\_UP  
LY\_AGING\_PREMATURE\_DN, LY\_AGING\_PREMATURE\_DN  
KEGG\_P53\_SIGNALING\_PATHWAY, KEGG\_P53\_SIGNALING\_PATHWAY  
ODONNELL\_TFRC\_TARGETS\_DN, ODONNELL\_TFRC\_TARGETS\_DN  
BHATI\_G2M\_ARREST\_BY\_2METHOXYESTRADIOL\_UP, BHATI\_G2M\_ARREST\_BY\_2METHOXYESTRADIOL\_UP  
GENTILE\_UV\_RESPONSE\_CLUSTER\_D2, GENTILE\_UV\_RESPONSE\_CLUSTER\_D2  
REACTOME\_E2F\_MEDIATED\_REGULATION\_OF\_DNA\_REPLICATION, REACTOME\_E2F\_MEDIATED\_REGULATION\_OF\_DNA\_REPLICATION  
BILD\_CTNNB1\_ONCOGENIC\_SIGNATURE, BILD\_CTNNB1\_ONCOGENIC\_SIGNATURE  
REACTOME\_DISEASES\_OF\_MITOTIC\_CELL\_CYCLE, REACTOME\_DISEASES\_OF\_MITOTIC\_CELL\_CYCLE  
LUNDSTEDT\_DENDRITIC\_CELL\_MATURATION\_C, LUNDSTEDT\_DENDRITIC\_CELL\_MATURATION\_C  
BIOCARTA\_G2\_PATHWAY, BIOCARTA\_G2\_PATHWAY  
PID\_RB\_1PATHWAY, PID\_RB\_1PATHWAY  
WP\_DNA\_MISMATCH\_REPAIR, WP\_DNA\_MISMATCH\_REPAIR  
KEGG\_MISMATCH\_REPAIR, KEGG\_MISMATCH\_REPAIR  
REACTOME\_SIGNALING\_BY\_TGFB\_FAMILY\_MEMBERS, REACTOME\_SIGNALING\_BY\_TGFB\_FAMILY\_MEMBERS  
KOKKINAKIS\_METHIONINE\_DEPRIVATION\_96HR\_DN, KOKKINAKIS\_METHIONINE\_DEPRIVATION\_96HR\_DN  
KEGG\_BASE\_EXCISION\_REPAIR, KEGG\_BASE\_EXCISION\_REPAIR  
REACTOME\_DEADENYLATION\_OF\_MRNA, REACTOME\_DEADENYLATION\_OF\_MRNA  
WP\_ATM\_SIGNALING\_NETWORK\_IN\_DEVELOPMENT\_AND\_DISEASE, WP\_ATM\_SIGNALING\_NETWORK\_IN\_DEVELOPMENT\_AND\_DISEASE  
REACTOME\_RESOLUTION\_OF\_D\_LOOP\_STRUCTURES, REACTOME\_RESOLUTION\_OF\_D\_LOOP\_STRUCTURES  
PID\_AURORA\_A\_PATHWAY, PID\_AURORA\_A\_PATHWAY  
BURTON\_ADIPOGENESIS\_PEAK\_AT\_16HR, BURTON\_ADIPOGENESIS\_PEAK\_AT\_16HR  
FRASOR\_RESPONSE\_TO\_SERM\_OR\_FULVESTRANT\_DN, FRASOR\_RESPONSE\_TO\_SERM\_OR\_FULVESTRANT\_DN  
ZHANG\_RESPONSE\_TO\_IKK\_INHIBITOR\_AND\_TNF\_DN, ZHANG\_RESPONSE\_TO\_IKK\_INHIBITOR\_AND\_TNF\_DN  
HUMMEL\_BURKITT5\_LYMPHOMA\_UP, HUMMEL\_BURKITT5\_LYMPHOMA\_UP  
REACTOME\_RECOGNITION\_OF\_DNA\_DAMAGE\_BY\_PCNA\_CONTAINING\_REPLICATION\_COMPLEX, REACTOME\_RECOGNITION\_OF\_DNA\_DAMAGE\_BY\_PCNA\_CONTAINING\_REPLICATION\_COMPLEX  
PID\_P73PATHWAY, PID\_P73PATHWAY  
REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_E2F6, REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_E2F6  
LE\_EGR2\_TARGETS\_UP, LE\_EGR2\_TARGETS\_UP  
REACTOME\_CYCLIN\_A\_B1\_B2\_ASSOCIATED\_EVENTS\_DURING\_G2\_M\_TRANSITION, REACTOME\_CYCLIN\_A\_B1\_B2\_ASSOCIATED\_EVENTS\_DURING\_G2\_M\_TRANSITION  
MONTERO\_THYROID\_CANCER\_POOR\_SURVIVAL\_UP, MONTERO\_THYROID\_CANCER\_POOR\_SURVIVAL\_UP  
KALMA\_E2F1\_TARGETS, KALMA\_E2F1\_TARGETS  
EGUCHI\_CELL\_CYCLE\_RB1\_TARGETS, EGUCHI\_CELL\_CYCLE\_RB1\_TARGETS  
WP\_MIRNA\_REGULATION\_OF\_DNA\_DAMAGE\_RESPONSE, WP\_MIRNA\_REGULATION\_OF\_DNA\_DAMAGE\_RESPONSE  
REACTOME\_ABERRANT\_REGULATION\_OF\_MITOTIC\_EXIT\_IN\_CANCER\_DUE\_TO\_RB1\_DEFECTS, REACTOME\_ABERRANT\_REGULATION\_OF\_MITOTIC\_EXIT\_IN\_CANCER\_DUE\_TO\_RB1\_DEFECTS  
SU\_TESTS\_SU\_TESTS  
RIEGE\_DELTANP63\_DIRECT\_TARGETS\_UP, RIEGE\_DELTANP63\_DIRECT\_TARGETS\_UP  
REACTOME\_KSRP\_KHSRP\_BINDS\_AND\_DESTABILIZES\_MRNA, REACTOME\_KSRP\_KHSRP\_BINDS\_AND\_DESTABILIZES\_MRNA  
BIOCARTA\_TPO\_PATHWAY, BIOCARTA\_TPO\_PATHWAY  
REACTOME\_RESOLUTION\_OF\_AP\_SITES\_VIA\_THE\_MULTIPLE\_NUCLEOTIDE\_PATCH\_REPLACEMENT\_PATHWAY, REACTOME\_RESOLUTION\_OF\_AP\_SITES\_VIA\_THE\_MULTIPLE\_NUCLEOTIDE\_PATCH\_REPLACEMENT\_PATHWAY  
WILCOX\_RESPONSE\_TO\_PROGESTERONE\_UP, WILCOX\_RESPONSE\_TO\_PROGESTERONE\_UP  
PID\_BARD1\_PATHWAY, PID\_BARD1\_PATHWAY  
NADERI\_BREAST\_CANCER\_PROGNOSIS\_UP, NADERI\_BREAST\_CANCER\_PROGNOSIS\_UP  
BIOCARTA\_TNFR1\_PATHWAY, BIOCARTA\_TNFR1\_PATHWAY  
WP\_BASE\_EXCISION\_REPAIR, WP\_BASE\_EXCISION\_REPAIR  
REACTOME\_SIGNALING\_BY\_CYTOSOLIC\_JGFR1\_FUSION\_MUTANTS, REACTOME\_SIGNALING\_BY\_CYTOSOLIC\_JGFR1\_FUSION\_MUTANTS  
YIH\_RESPONSE\_TO\_ARSENITE\_C3, YIH\_RESPONSE\_TO\_ARSENITE\_C3  
REACTOME\_TP53\_REGULATES\_TRANSCRIPTION\_OF\_ADDITIONAL\_CELL\_CYCLE\_GENES\_WHOSE\_EXACT\_ROLE\_IN\_THE\_P53\_PATHWAY\_REMAIN\_UNCERTAIN, REACTOME\_TP53\_REGULATES\_TRANSCRIPTION\_OF\_ADDITIONAL\_CELL\_CYCLE\_GENES\_WHOSE\_EXACT\_ROLE\_IN\_THE\_P53\_PATHWAY\_REMAIN\_UNCERTAIN  
REACTOME\_DNA\_DOUBLE\_STRAND\_BREAK\_RESPONSE, REACTOME\_DNA\_DOUBLE\_STRAND\_BREAK\_RESPONSE  
PID\_NFKAPPAB\_CANONICAL\_PATHWAY, PID\_NFKAPPAB\_CANONICAL\_PATHWAY  
STEIN\_ESRRA\_TARGETS\_RESPONSE\_TO\_ESTROGEN\_DN, STEIN\_ESRRA\_TARGETS\_RESPONSE\_TO\_ESTROGEN\_DN  
WP\_INTERACTOME\_OF\_POLYCOMB\_REPRESSIVE\_COMPLEX\_2\_PRC2, WP\_INTERACTOME\_OF\_POLYCOMB\_REPRESSIVE\_COMPLEX\_2\_PRC2  
LY\_AGING\_MIDDLE\_DN, LY\_AGING\_MIDDLE\_DN  
SMIRNOV\_RESPONSE\_TO\_IR\_6HR\_DN, SMIRNOV\_RESPONSE\_TO\_IR\_6HR\_DN  
PODAR\_RESPONSE\_TO\_ADAPHOSTIN\_DN, PODAR\_RESPONSE\_TO\_ADAPHOSTIN\_DN  
REACTOME\_G1\_S\_SPECIFIC\_TRANSCRIPTION, REACTOME\_G1\_S\_SPECIFIC\_TRANSCRIPTION  
GOLUB\_ALL\_VS\_AML\_UP, GOLUB\_ALL\_VS\_AML\_UP  
TANG\_SENESCENCE\_TP53\_TARGETS\_DN, TANG\_SENESCENCE\_TP53\_TARGETS\_DN  
PID\_E2F\_PATHWAY, PID\_E2F\_PATHWAY  
REACTOME\_INITIATION\_OF\_NUCLEAR\_ENVELOPE\_NE\_REFORMATION, REACTOME\_INITIATION\_OF\_NUCLEAR\_ENVELOPE\_NE\_REFORMATION  
REACTOME\_LAGGING\_STRAND\_SYNTHESIS, REACTOME\_LAGGING\_STRAND\_SYNTHESIS  
PID\_ERA\_GENOMIC\_PATHWAY, PID\_ERA\_GENOMIC\_PATHWAY  
BIOCARTA\_ATM\_PATHWAY, BIOCARTA\_ATM\_PATHWAY  
BIOCARTA\_EPO\_PATHWAY, BIOCARTA\_EPO\_PATHWAY  
REACTOME\_CONVERSION\_FROM\_APC\_C\_CDC20\_TO\_APC\_C\_CDH1\_IN\_LATE\_ANAPHASE, REACTOME\_CONVERSION\_FROM\_APC\_C\_CDC20\_TO\_APC\_C\_CDH1\_IN\_LATE\_ANAPHASE  
GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_TURQUOISE\_DN, GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_TURQUOISE\_DN  
SLEBOB\_HEAD\_AND\_NECK\_CANCER\_WITH\_HPV\_UP, SLEBOB\_HEAD\_AND\_NECK\_CANCER\_WITH\_HPV\_UP  
NEMETH\_INFLAMMATORY\_RESPONSE\_LPS\_DN, NEMETH\_INFLAMMATORY\_RESPONSE\_LPS\_DN  
SHEPARD\_CRASH\_AND\_BURN\_MUTANT\_DN, SHEPARD\_CRASH\_AND\_BURN\_MUTANT\_DN  
NAKAYAMA\_SOFT\_TISSUE\_TUMORS\_PCA2\_UP, NAKAYAMA\_SOFT\_TISSUE\_TUMORS\_PCA2\_UP  
REACTOME\_POLYMERASE\_SWITCHING\_ON\_THE\_C\_STRAND\_OF\_THE\_TELOMERE, REACTOME\_POLYMERASE\_SWITCHING\_ON\_THE\_C\_STRAND\_OF\_THE\_TELOMERE  
BIOCARTA\_MCM\_PATHWAY, BIOCARTA\_MCM\_PATHWAY  
YAGL\_AML\_SURVIVAL, YAGL\_AML\_SURVIVAL  
ZHAN\_EARLY\_DIFFERENTIATION\_GENES\_DN, ZHAN\_EARLY\_DIFFERENTIATION\_GENES\_DN  
BIOCARTA\_CELLCYCLE\_PATHWAY, BIOCARTA\_CELLCYCLE\_PATHWAY  
REACTOME\_UNWINDING\_OF\_DNA, REACTOME\_UNWINDING\_OF\_DNA  
ABE\_VEGFA\_TARGETS, ABE\_VEGFA\_TARGETS  
REACTOME\_PCNA\_DEPENDENT\_LONG\_PATCH\_BASE\_EXCISION\_REPAIR, REACTOME\_PCNA\_DEPENDENT\_LONG\_PATCH\_BASE\_EXCISION\_REPAIR  
PETROVA\_ENDOTHELIUM\_LYMPHATIC\_VS\_BLOOD\_UP, PETROVA\_ENDOTHELIUM\_LYMPHATIC\_VS\_BLOOD\_UP  
ZHAN\_V1\_LATE\_DIFFERENTIATION\_GENES\_DN, ZHAN\_V1\_LATE\_DIFFERENTIATION\_GENES\_DN  
REACTOME\_MISMATCH\_REPAIR, REACTOME\_MISMATCH\_REPAIR  
KEGG\_NON\_HOMOLOGOUS\_END\_JOINING, KEGG\_NON\_HOMOLOGOUS\_END\_JOINING  
REACTOME\_INHIBITION\_OF\_REPLICATION\_INITIATION\_OF\_DAMAGED\_DNA\_BY\_RB1\_E2F1, REACTOME\_INHIBITION\_OF\_REPLICATION\_INITIATION\_OF\_DAMAGED\_DNA\_BY\_RB1\_E2F1  
BIOCARTA\_EGF\_PATHWAY, BIOCARTA\_EGF\_PATHWAY  
REACTOME\_DEPOLYMERISATION\_OF\_THE\_NUCLEAR\_LAMINA, REACTOME\_DEPOLYMERISATION\_OF\_THE\_NUCLEAR\_LAMINA  
SESTO\_RESPONSE\_TO\_UV\_C7, SESTO\_RESPONSE\_TO\_UV\_C7