

REACTOME\_S\_PHASE, REACTOME\_S\_PHASE  
SOTIRIOU\_BREAST\_CANCER\_GRADE\_1\_VS\_3\_UP, SOTIRIOU\_BREAST\_CANCER\_GRADE\_1\_VS\_3\_UP  
PUJANA\_XPRSS\_INT\_NETWORK, PUJANA\_XPRSS\_INT\_NETWORK  
REACTOME\_MITOTIC\_G1\_PHASE\_AND\_G1\_S\_TRANSITION, REACTOME\_MITOTIC\_G1\_PHASE\_AND\_G1\_S\_TRANSITION  
ROSTY\_CERVICAL\_CANCER\_PROLIFERATION\_CLUSTER, ROSTY\_CERVICAL\_CANCER\_PROLIFERATION\_CLUSTER  
WINNEPENINCKX\_MELANOMA\_METASTASIS\_UP, WINNEPENINCKX\_MELANOMA\_METASTASIS\_UP  
REACTOME\_DNA\_DOUBLE\_STRAND\_BREAK\_REPAIR, REACTOME\_DNA\_DOUBLE\_STRAND\_BREAK\_REPAIR  
REACTOME\_G2\_M\_CHECKPOINTS, REACTOME\_G2\_M\_CHECKPOINTS  
REACTOME\_DNA\_REPLICATION, REACTOME\_DNA\_REPLICATION  
WHITFIELD\_CELL\_CYCLE\_G2\_M, WHITFIELD\_CELL\_CYCLE\_G2\_M  
REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY, REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY  
WP\_DNA\_REPAIR\_PATHWAYS\_FULL\_NETWORK, WP\_DNA\_REPAIR\_PATHWAYS\_FULL\_NETWORK  
CROONQUIST\_IL6\_DEPRIVATION\_DN, CROONQUIST\_IL6\_DEPRIVATION\_DN  
PUJANA\_BREAST\_CANCER\_LIT\_INT\_NETWORK, PUJANA\_BREAST\_CANCER\_LIT\_INT\_NETWORK  
WHITEFORD\_PEDIATRIC\_CANCER\_MARKERS, WHITEFORD\_PEDIATRIC\_CANCER\_MARKERS  
KONG\_E2F3\_TARGETS, KONG\_E2F3\_TARGETS  
ZHOU\_CELL\_CYCLE\_GENES\_IN\_IR\_RESPONSE\_6HR, ZHOU\_CELL\_CYCLE\_GENES\_IN\_IR\_RESPONSE\_6HR  
BLANCO\_MELO\_BRONCHIAL\_EPITHELIAL\_CELLS\_INFLUENZA\_A\_DEL\_NSI\_INFECTION\_DN, BLANCO\_MELO\_BRONCHIAL\_EPITHELIAL\_CELLS\_INFLUENZA\_A\_DEL\_NSI\_INFECTION\_DN  
REACTOME\_HOMOLOGY\_DIRECTED\_REPAIR, REACTOME\_HOMOLOGY\_DIRECTED\_REPAIR  
REACTOME\_DNA\_REPLICATION\_PRE\_INITIATION, REACTOME\_DNA\_REPLICATION\_PRE\_INITIATION  
FERREIRA\_EWINGS\_SARCOMA\_UNSTABLE\_VS\_STABLE\_UP, FERREIRA\_EWINGS\_SARCOMA\_UNSTABLE\_VS\_STABLE\_UP  
GARCIA\_TARGETS\_OF\_FLII\_AND\_DAX1\_DN, GARCIA\_TARGETS\_OF\_FLII\_AND\_DAX1\_DN  
FISCHER\_G1\_S\_CELL\_CYCLE, FISCHER\_G1\_S\_CELL\_CYCLE  
REACTOME\_SWITCHING\_OF\_ORIGINS\_TO\_A\_POST\_REPLICATIVE\_STATE, REACTOME\_SWITCHING\_OF\_ORIGINS\_TO\_A\_POST\_REPLICATIVE\_STATE  
WP\_DNA\_IRDAMAGE\_AND\_CELLULAR\_RESPONSE\_VIA\_ATR, WP\_DNA\_IRDAMAGE\_AND\_CELLULAR\_RESPONSE\_VIA\_ATR  
KAUFFMANN\_MELANOMA\_RELAPSE\_UP, KAUFFMANN\_MELANOMA\_RELAPSE\_UP  
REN\_BOUND\_BY\_E2F, REN\_BOUND\_BY\_E2F  
WP\_RETINOBLASTOMA\_GENE\_IN\_CANCER, WP\_RETINOBLASTOMA\_GENE\_IN\_CANCER  
FLORIO\_NEOCORTEX\_BASAL\_RADIAL\_GLIA\_DN, FLORIO\_NEOCORTEX\_BASAL\_RADIAL\_GLIA\_DN  
ZHOU\_CELL\_CYCLE\_GENES\_IN\_IR\_RESPONSE\_24HR, ZHOU\_CELL\_CYCLE\_GENES\_IN\_IR\_RESPONSE\_24HR  
KAUFFMANN\_DNA\_REPLICATION\_GENES, KAUFFMANN\_DNA\_REPLICATION\_GENES  
REACTOME\_ASSEMBLY\_OF\_THE\_PRE\_REPLICATIVE\_COMPLEX, REACTOME\_ASSEMBLY\_OF\_THE\_PRE\_REPLICATIVE\_COMPLEX  
PYEON\_CANCER\_HEAD\_AND\_NECK\_VS\_CERVICAL\_UP, PYEON\_CANCER\_HEAD\_AND\_NECK\_VS\_CERVICAL\_UP  
PUJANA\_BREAST\_CANCER\_WITH\_BRCA1\_MUTATED\_UP, PUJANA\_BREAST\_CANCER\_WITH\_BRCA1\_MUTATED\_UP  
WHITFIELD\_CELL\_CYCLE\_G2, WHITFIELD\_CELL\_CYCLE\_G2  
ISHIDA\_E2F\_TARGETS, ISHIDA\_E2F\_TARGETS  
CHIANG\_LIVER\_CANCER\_SUBCLASS\_PROLIFERATION\_UP, CHIANG\_LIVER\_CANCER\_SUBCLASS\_PROLIFERATION\_UP  
CROONQUIST\_NRAS\_SIGNALING\_DN, CROONQUIST\_NRAS\_SIGNALING\_DN  
GRAHAM\_CML\_DIVIDING\_VS\_NORMAL\_QUIESCENT\_UP, GRAHAM\_CML\_DIVIDING\_VS\_NORMAL\_QUIESCENT\_UP  
VILLANUEVA\_LIVER\_CANCER\_KRT19\_UP, VILLANUEVA\_LIVER\_CANCER\_KRT19\_UP  
SARRIO\_EPITHELIAL\_MESENCHYMAL\_TRANSITION\_UP, SARRIO\_EPITHELIAL\_MESENCHYMAL\_TRANSITION\_UP  
REACTOME\_ORC1\_REMOVAL\_FROM\_CHROMATIN, REACTOME\_ORC1\_REMOVAL\_FROM\_CHROMATIN  
HOFFMANN\_LARGE\_TO\_SMALL\_PRE\_BIL\_LYMPHOCYTE\_UP, HOFFMANN\_LARGE\_TO\_SMALL\_PRE\_BIL\_LYMPHOCYTE\_UP  
WHITFIELD\_CELL\_CYCLE\_G1\_S, WHITFIELD\_CELL\_CYCLE\_G1\_S  
REACTOME\_ACTIVATION\_OF\_ATR\_IN\_RESPONSE\_TO\_REPLICATION\_STRESS, REACTOME\_ACTIVATION\_OF\_ATR\_IN\_RESPONSE\_TO\_REPLICATION\_STRESS  
CHEMNITZ\_RESPONSE\_TO\_PROSTAGLANDIN\_E2\_UP, CHEMNITZ\_RESPONSE\_TO\_PROSTAGLANDIN\_E2\_UP  
BURTON\_ADIPOGENESIS\_3, BURTON\_ADIPOGENESIS\_3  
WAKASUGI\_HAVE\_ZNF143\_BINDING\_SITES, WAKASUGI\_HAVE\_ZNF143\_BINDING\_SITES  
KEGG\_CELL\_CYCLE, KEGG\_CELL\_CYCLE  
MORI\_EMU\_MYC\_LYMPHOMA\_BY\_ONSET\_TIME\_UP, MORI\_EMU\_MYC\_LYMPHOMA\_BY\_ONSET\_TIME\_UP  
REACTOME\_APC\_C\_MEDIATED\_DEGRADATION\_OF\_CELL\_CYCLE\_PROTEINS, REACTOME\_APC\_C\_MEDIATED\_DEGRADATION\_OF\_CELL\_CYCLE\_PROTEINS  
DAZARD\_UV\_RESPONSE\_CLUSTER\_G6, DAZARD\_UV\_RESPONSE\_CLUSTER\_G6  
RUIZ\_TNC\_TARGETS\_DN, RUIZ\_TNC\_TARGETS\_DN  
WP\_CELL\_CYCLE, WP\_CELL\_CYCLE  
REACTOME\_HDR\_THROUGH\_HOMOLOGOUS\_RECOMBINATION\_HRR, REACTOME\_HDR\_THROUGH\_HOMOLOGOUS\_RECOMBINATION\_HRR  
ODONNELL\_TARGETS\_OF\_MYC\_AND\_TFRC\_DN, ODONNELL\_TARGETS\_OF\_MYC\_AND\_TFRC\_DN  
WP\_DNA\_REPLICATION, WP\_DNA\_REPLICATION  
MORI\_IMMATURE\_B\_LYMPHOCYTE\_DN, MORI\_IMMATURE\_B\_LYMPHOCYTE\_DN  
REACTOME\_PROCESSING\_OF\_DNA\_DOUBLE\_STRAND\_BREAK\_ENDS, REACTOME\_PROCESSING\_OF\_DNA\_DOUBLE\_STRAND\_BREAK\_ENDS  
WHITFIELD\_CELL\_CYCLE\_S, WHITFIELD\_CELL\_CYCLE\_S  
BROWNE\_HCMV\_INFECTION\_6HR\_DN, BROWNE\_HCMV\_INFECTION\_6HR\_DN  
VERNELL\_RETINOBLASTOMA\_PATHWAY\_UP, VERNELL\_RETINOBLASTOMA\_PATHWAY\_UP  
KAMMINGA\_EZH2\_TARGETS, KAMMINGA\_EZH2\_TARGETS  
ZHAN\_MULTIPLE\_MYELOMA\_SUBGROUPS, ZHAN\_MULTIPLE\_MYELOMA\_SUBGROUPS  
FRASOR\_RESPONSE\_TO\_SERM\_OR\_FULVESTRANT\_DN, FRASOR\_RESPONSE\_TO\_SERM\_OR\_FULVESTRANT\_DN  
LY\_AGING\_OLD\_DN, LY\_AGING\_OLD\_DN  
PID\_PLK1\_PATHWAY, PID\_PLK1\_PATHWAY  
ZHAN\_MULTIPLE\_MYELOMA\_PR\_UP, ZHAN\_MULTIPLE\_MYELOMA\_PR\_UP  
KANG\_DOKORUBIN\_RESISTANCE\_UP, KANG\_DOKORUBIN\_RESISTANCE\_UP  
WP\_DNA\_IRDOUBLE\_STRAND\_BREAKS\_DSBS\_AND\_CELLULAR\_RESPONSE\_VIA\_ATM, WP\_DNA\_IRDOUBLE\_STRAND\_BREAKS\_DSBS\_AND\_CELLULAR\_RESPONSE\_VIA\_ATM  
REACTOME\_DNA\_DAMAGE\_BYPASS, REACTOME\_DNA\_DAMAGE\_BYPASS  
REACTOME\_ACTIVATION\_OF\_THE\_PRE\_REPLICATIVE\_COMPLEX, REACTOME\_ACTIVATION\_OF\_THE\_PRE\_REPLICATIVE\_COMPLEX  
REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY\_THROUGH\_PHOSPHORYLATION, REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY\_THROUGH\_PHOSPHORYLATION  
WU\_APOPTOSIS\_BY\_CDKN1A\_VIA\_TP53, WU\_APOPTOSIS\_BY\_CDKN1A\_VIA\_TP53  
REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_E2F6, REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_E2F6  
RIZ\_ERYTHROID\_DIFFERENTIATION, RIZ\_ERYTHROID\_DIFFERENTIATION  
REACTOME\_G2\_M\_DNA\_DAMAGE\_CHECKPOINT, REACTOME\_G2\_M\_DNA\_DAMAGE\_CHECKPOINT  
PID\_ATM\_PATHWAY, PID\_ATM\_PATHWAY  
REACTOME\_MEIOSIS, REACTOME\_MEIOSIS  
SONG\_TARGETS\_OF\_IES6\_CMV\_PROTEIN, SONG\_TARGETS\_OF\_IES6\_CMV\_PROTEIN  
GRAHAM\_NORMAL\_QUIESCENT\_VS\_NORMAL\_DIVIDING\_DN, GRAHAM\_NORMAL\_QUIESCENT\_VS\_NORMAL\_DIVIDING\_DN  
PID\_ATR\_PATHWAY, PID\_ATR\_PATHWAY  
GEORGES\_CELL\_CYCLE\_MIR192\_TARGETS, GEORGES\_CELL\_CYCLE\_MIR192\_TARGETS  
IRITANI\_MAD1\_TARGETS\_DN, IRITANI\_MAD1\_TARGETS\_DN  
REACTOME\_MEIOTIC\_RECOMBINATION, REACTOME\_MEIOTIC\_RECOMBINATION  
WP\_DNA\_DAMAGE\_RESPONSE, WP\_DNA\_DAMAGE\_RESPONSE  
PID\_E2F\_PATHWAY, PID\_E2F\_PATHWAY  
VANTVEER\_BREAST\_CANCER\_METASTASIS\_DN, VANTVEER\_BREAST\_CANCER\_METASTASIS\_DN  
LEE\_EARLY\_T\_LYMPHOCYTE\_UP, LEE\_EARLY\_T\_LYMPHOCYTE\_UP  
JI\_RESPONSE\_TO\_FSH\_DN, JI\_RESPONSE\_TO\_FSH\_DN  
ALCALAY\_AML\_BY\_NPM1\_LOCALIZATION\_DN, ALCALAY\_AML\_BY\_NPM1\_LOCALIZATION\_DN  
EGUCHI\_CELL\_CYCLE\_RB1\_TARGETS, EGUCHI\_CELL\_CYCLE\_RB1\_TARGETS  
WP\_INTEGRATED\_BREAST\_CANCER\_PATHWAY, WP\_INTEGRATED\_BREAST\_CANCER\_PATHWAY  
BENPORATH\_ES\_CORE\_NINE\_CORRELATED, BENPORATH\_ES\_CORE\_NINE\_CORRELATED  
REACTOME\_EXTENSION\_OF\_TELOMERES, REACTOME\_EXTENSION\_OF\_TELOMERES  
LE\_ECR2\_TARGETS\_UP, LE\_ECR2\_TARGETS\_UP  
STEIN\_ESRRA\_TARGETS\_RESPONSIVE\_TO\_ESTROGEN\_DN, STEIN\_ESRRA\_TARGETS\_RESPONSIVE\_TO\_ESTROGEN\_DN  
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  
ODONNELL\_TFRC\_TARGETS\_DN, ODONNELL\_TFRC\_TARGETS\_DN  
WHITFIELD\_CELL\_CYCLE\_LITERATURE, WHITFIELD\_CELL\_CYCLE\_LITERATURE  
YAMAZAKI\_TCEB3\_TARGETS\_DN, YAMAZAKI\_TCEB3\_TARGETS\_DN  
BIOCARTA\_MCM\_PATHWAY, BIOCARTA\_MCM\_PATHWAY  
RAMASWAMY\_METASTASIS\_UP, RAMASWAMY\_METASTASIS\_UP  
DACOSTA\_UV\_RESPONSE\_VIA\_ERCC3\_COMMON\_UP, DACOSTA\_UV\_RESPONSE\_VIA\_ERCC3\_COMMON\_UP  
REACTOME\_DEPOSITION\_OF\_NEW\_CENPA\_CONTAINING\_NUCLEOSOMES\_AT\_THE\_CENTROMERE, REACTOME\_DEPOSITION\_OF\_NEW\_CENPA\_CONTAINING\_NUCLEOSOMES\_AT\_THE\_CENTROMERE  
ROESSLER\_LIVER\_CANCER\_METASTASIS\_UP, ROESSLER\_LIVER\_CANCER\_METASTASIS\_UP  
REICHERT\_MITOSIS\_LIN9\_TARGETS, REICHERT\_MITOSIS\_LIN9\_TARGETS  
REACTOME\_DISEASES\_OF\_PROGRAMMED\_CELL\_DEATH, REACTOME\_DISEASES\_OF\_PROGRAMMED\_CELL\_DEATH  
WP\_PATHWAYS\_AFFECTED\_IN\_ADENOID\_CYSTIC\_CARINOMA, WP\_PATHWAYS\_AFFECTED\_IN\_ADENOID\_CYSTIC\_CARINOMA  
JIANG\_HYPOXIA\_CANCER, JIANG\_HYPOXIA\_CANCER  
GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_TURQUOISE\_DN, GARGALOVIC\_RESPONSE\_TO\_OXIDIZED\_PHOSPHOLIPIDS\_TURQUOISE\_DN  
PID\_BARD1\_PATHWAY, PID\_BARD1\_PATHWAY  
PID\_FANCONI\_PATHWAY, PID\_FANCONI\_PATHWAY  
REACTOME\_DNA\_STRAND\_ELONGATION, REACTOME\_DNA\_STRAND\_ELONGATION  
KEGG\_DNA\_REPLICATION, KEGG\_DNA\_REPLICATION  
MMS\_MOUSE\_LYMPH\_HIGH\_4HRS\_UP, MMS\_MOUSE\_LYMPH\_HIGH\_4HRS\_UP  
REACTOME\_RESOLUTION\_OF\_D\_LOOP\_STRUCTURES, REACTOME\_RESOLUTION\_OF\_D\_LOOP\_STRUCTURES  
REACTOME\_DUAL\_INCISION\_IN\_GG\_NER, REACTOME\_DUAL\_INCISION\_IN\_GG\_NER  
REACTOME\_HOMOLOGOUS\_DNA\_PAIRING\_AND\_STRAND\_EXCHANGE, REACTOME\_HOMOLOGOUS\_DNA\_PAIRING\_AND\_STRAND\_EXCHANGE  
REACTOME\_BASE\_EXCISION\_REPAIR, REACTOME\_BASE\_EXCISION\_REPAIR  
GAVIN\_FOXP3\_TARGETS\_CLUSTER\_P6, GAVIN\_FOXP3\_TARGETS\_CLUSTER\_P6  
PYEON\_HPV\_POSITIVE\_TUMORS\_UP, PYEON\_HPV\_POSITIVE\_TUMORS\_UP  
WP\_ATM\_SIGNALING\_PATHWAY, WP\_ATM\_SIGNALING\_PATHWAY  
REACTOME\_APC\_CDC20\_MEDIATED\_DEGRADATION\_OF\_NEK2A, REACTOME\_APC\_CDC20\_MEDIATED\_DEGRADATION\_OF\_NEK2A  
HOFMANN\_CELL\_LYMPHOMA\_UP, HOFMANN\_CELL\_LYMPHOMA\_UP  
REACTOME\_G1\_S\_SPECIFIC\_TRANSCRIPTION, REACTOME\_G1\_S\_SPECIFIC\_TRANSCRIPTION  
BENITEZ\_GBM\_PROTEASOME\_INHIBITION\_RESPONSE, BENITEZ\_GBM\_PROTEASOME\_INHIBITION\_RESPONSE  
MOLENAAR\_TARGETS\_OF\_CCND1\_AND\_CDK4\_DN, MOLENAAR\_TARGETS\_OF\_CCND1\_AND\_CDK4\_DN  
REACTOME\_TERMINATION\_OF\_TRANSLESION\_DNA\_SYNTHESIS, REACTOME\_TERMINATION\_OF\_TRANSLESION\_DNA\_SYNTHESIS  
ZAMORA\_NOS2\_TARGETS\_UP, ZAMORA\_NOS2\_TARGETS\_UP  
REACTOME\_RECOGNITION\_OF\_DNA\_DAMAGE\_BY\_PCNA\_CONTAINING\_REPLICATION\_COMPLEX, REACTOME\_RECOGNITION\_OF\_DNA\_DAMAGE\_BY\_PCNA\_CONTAINING\_REPLICATION\_COMPLEX  
BENPORATH\_NOS\_TARGETS, BENPORATH\_NOS\_TARGETS  
REACTOME\_G0\_AND\_EARLY\_G1, REACTOME\_G0\_AND\_EARLY\_G1  
SASAKI\_ADULT\_T\_CELL\_LEUKEMIA, SASAKI\_ADULT\_T\_CELL\_LEUKEMIA  
WP\_G1\_TO\_S\_CELL\_CYCLE\_CONTROL, WP\_G1\_TO\_S\_CELL\_CYCLE\_CONTROL  
MARKEY\_RB1\_CHRONIC\_LOF\_UP, MARKEY\_RB1\_CHRONIC\_LOF\_UP  
KEGG\_BASE\_EXCISION\_REPAIR, KEGG\_BASE\_EXCISION\_REPAIR  
GENTILE\_RESPONSE\_CLUSTER\_D3, GENTILE\_RESPONSE\_CLUSTER\_D3  
REACTOME\_RESOLUTION\_OF\_ABASIC\_SITES\_AP\_SITES, REACTOME\_RESOLUTION\_OF\_ABASIC\_SITES\_AP\_SITES  
REACTOME\_HDR\_THROUGH\_SINGLE\_STRAND\_ANNHEALING\_SSA, REACTOME\_HDR\_THROUGH\_SINGLE\_STRAND\_ANNHEALING\_SSA  
JACKSON\_DNMT1\_TARGETS\_UP, JACKSON\_DNMT1\_TARGETS\_UP  
WP\_BASE\_EXCISION\_REPAIR, WP\_BASE\_EXCISION\_REPAIR  
WP\_INTEGRATED\_CANCER\_PATHWAY, WP\_INTEGRATED\_CANCER\_PATHWAY  
BHATI\_G2M\_ARREST\_BY\_2METHOXYESTRADIOL\_UP, BHATI\_G2M\_ARREST\_BY\_2METHOXYESTRADIOL\_UP  
HU\_GENOTOXIC\_DAMAGE\_4HR, HU\_GENOTOXIC\_DAMAGE\_4HR  
FURUKAWA\_DUSP6\_TARGETS\_PC135\_DN, FURUKAWA\_DUSP6\_TARGETS\_PC135\_DN  
KOKKINAKIS\_METHIONINE\_DEPRIVATION\_48HR\_UP, KOKKINAKIS\_METHIONINE\_DEPRIVATION\_48HR\_UP  
REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_POLK, REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_POLK  
BOVAULT\_LIVER\_CANCER\_SUBCLASS\_G123\_UP, BOVAULT\_LIVER\_CANCER\_SUBCLASS\_G123\_UP  
REACTOME\_GAP\_FILLING\_DNA\_REPAIR\_SYNTHESIS\_AND\_LIGATION\_IN\_GG\_NER, REACTOME\_GAP\_FILLING\_DNA\_REPAIR\_SYNTHESIS\_AND\_LIGATION\_IN\_GG\_NER  
BURTON\_ADIPOGENESIS\_PEAK\_AT\_16HR, BURTON\_ADIPOGENESIS\_PEAK\_AT\_16HR  
KEGG\_OOCYTE\_MEIOSIS, KEGG\_OOCYTE\_MEIOSIS  
WP\_FAS\_LIGAND\_FASL\_PATHWAY\_AND\_STRESS\_INDUCION\_OF\_HEAT\_SHOCK\_PROTEINS\_HSP\_REGULATION, WP\_FAS\_LIGAND\_FASL\_PATHWAY\_AND\_STRESS\_INDUCION\_OF\_HEAT\_SHOCK\_PROTEINS\_HSP\_REGULATION  
REACTOME\_TELOMERE\_C\_STRAND\_LAGGING\_STRAND\_SYNTHESIS, REACTOME\_TELOMERE\_C\_STRAND\_LAGGING\_STRAND\_SYNTHESIS  
ACEVEDO\_LIVER\_CANCER\_WITH\_H3K9ME3\_DN, ACEVEDO\_LIVER\_CANCER\_WITH\_H3K9ME3\_DN  
BROWNE\_HCMV\_INFECTION\_24HR\_UP, BROWNE\_HCMV\_INFECTION\_24HR\_UP  
CHEN\_HOXA5\_TARGETS\_9HR\_DN, CHEN\_HOXA5\_TARGETS\_9HR\_DN  
BIOCARTA\_FAS\_PATHWAY, BIOCARTA\_FAS\_PATHWAY  
REACTOME\_CYCLIN\_D\_ASSOCIATED\_EVENTS\_IN\_G1, REACTOME\_CYCLIN\_D\_ASSOCIATED\_EVENTS\_IN\_G1  
WP\_GASTRIC\_CANCER\_NETWORK\_1, WP\_GASTRIC\_CANCER\_NETWORK\_1  
PEART\_HDAC\_PROLIFERATION\_CLUSTER\_UP, PEART\_HDAC\_PROLIFERATION\_CLUSTER\_UP  
REACTOME\_TRANSCRIPTION\_OF\_E2F\_TARGETS\_UNDER\_NEGATIVE\_CONTROL\_BY\_DREAM\_COMPLEX, REACTOME\_TRANSCRIPTION\_OF\_E2F\_TARGETS\_UNDER\_NEGATIVE\_CONTROL\_BY\_DREAM\_COMPLEX  
BOVAULT\_LIVER\_CANCER\_SUBCLASS\_G23\_UP, BOVAULT\_LIVER\_CANCER\_SUBCLASS\_G23\_UP  
SHAFFER\_IRF4\_TARGETS\_IN\_ACTIVATED\_DENDRITIC\_CELL, SHAFFER\_IRF4\_TARGETS\_IN\_ACTIVATED\_DENDRITIC\_CELL  
SCIAN\_CELL\_CYCLE\_TARGETS\_OF\_TP53\_AND\_TP73\_DN, SCIAN\_CELL\_CYCLE\_TARGETS\_OF\_TP53\_AND\_TP73\_DN  
SCIBETTA\_KDM5B\_TARGETS\_DN, SCIBETTA\_KDM5B\_TARGETS\_DN  
BIOCARTA\_TNFR1\_PATHWAY, BIOCARTA\_TNFR1\_PATHWAY  
NUNODA\_RESPONSE\_TO\_DASATINIB\_IMATINIB\_UP, NUNODA\_RESPONSE\_TO\_DASATINIB\_IMATINIB\_UP  
WP\_NUCLEOTIDE\_EXCISION\_REPAIR, WP\_NUCLEOTIDE\_EXCISION\_REPAIR  
KEGG\_NUCLEOTIDE\_EXCISION\_REPAIR, KEGG\_NUCLEOTIDE\_EXCISION\_REPAIR  
CHOW\_RASSF1\_TARGETS\_UP, CHOW\_RASSF1\_TARGETS\_UP  
REACTOME\_DISEASES\_OF\_MITOTIC\_CELL\_CYCLE, REACTOME\_DISEASES\_OF\_MITOTIC\_CELL\_CYCLE  
WP\_DNA\_MISMATCH\_REPAIR, WP\_DNA\_MISMATCH\_REPAIR  
REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_POLH, REACTOME\_TRANSLESION\_SYNTHESIS\_BY\_POLH  
KOKKINAKIS\_METHIONINE\_DEPRIVATION\_96HR\_DN, KOKKINAKIS\_METHIONINE\_DEPRIVATION\_96HR\_DN  
REACTOME\_REPRODUCTION, REACTOME\_REPRODUCTION  
SUNG\_METASTASIS\_STROMA\_UP, SUNG\_METASTASIS\_STROMA\_UP  
SHEPARD\_CRASH\_AND\_BURN\_MUTANT\_DN, SHEPARD\_CRASH\_AND\_BURN\_MUTANT\_DN  
FARMER\_BREAST\_CANCER\_CLUSTER\_2, FARMER\_BREAST\_CANCER\_CLUSTER\_2  
REACTOME\_MEIOTIC\_SYNAPSIS, REACTOME\_MEIOTIC\_SYNAPSIS  
FIGUEROA\_AML\_METHYLATION\_CLUSTER\_3\_UP, FIGUEROA\_AML\_METHYLATION\_CLUSTER\_3\_UP  
REACTOME\_PCNA\_DEPENDENT\_LONG\_PATCH\_BASE\_EXCISION\_REPAIR, REACTOME\_PCNA\_DEPENDENT\_LONG\_PATCH\_BASE\_EXCISION\_REPAIR  
PID\_P73PATHWAY, PID\_P73PATHWAY  
JOHANSSON\_GLIOMAGENESIS\_BY\_PDGF\_UP, JOHANSSON\_GLIOMAGENESIS\_BY\_PDGF\_UP  
REACTOME\_RESOLUTION\_OF\_D\_LOOP\_STRUCTURES\_THROUGH\_SYNTHESIS\_DEPENDENT\_STRAND\_ANNHEALING\_SDSA, REACTOME\_RESOLUTION\_OF\_D\_LOOP\_STRUCTURES\_THROUGH\_SYNTHESIS\_DEPENDENT\_STRAND\_ANNHEALING\_SDSA  
REACTOME\_RESOLUTION\_OF\_AP\_SITES\_VIA\_THE\_MULTIPLE\_NUCLEOTIDE\_PATCH\_REPLACEMENT\_PATHWAY, REACTOME\_RESOLUTION\_OF\_AP\_SITES\_VIA\_THE\_MULTIPLE\_NUCLEOTIDE\_PATCH\_REPLACEMENT\_PATHWAY  
CHEBOTAEV\_GR\_TARGETS\_UP, CHEBOTAEV\_GR\_TARGETS\_UP  
GREENBAUM\_E2A\_TARGETS\_UP, GREENBAUM\_E2A\_TARGETS\_UP  
LY\_AGING\_PREMATURE\_DN, LY\_AGING\_PREMATURE\_DN  
VERHAAK\_GLOBLASTOMA\_PRONEURAL, VERHAAK\_GLOBLASTOMA\_PRONEURAL  
THILLAINADESAN\_ZNF217\_TARGETS\_UP, THILLAINADESAN\_ZNF217\_TARGETS\_UP  
CHIN\_BREAST\_CANCER\_COPY\_NUMBER\_UP, CHIN\_BREAST\_CANCER\_COPY\_NUMBER\_UP  
GHO\_ATF5\_TARGETS\_DN, GHO\_ATF5\_TARGETS\_DN  
YIH\_RESPONSE\_TO\_ARSENITE\_C3, YIH\_RESPONSE\_TO\_ARSENITE\_C3  
BIOCARTA\_G1\_PATHWAY, BIOCARTA\_G1\_PATHWAY  
PEART\_HDAC\_PROLIFERATION\_CLUSTER\_DN, PEART\_HDAC\_PROLIFERATION\_CLUSTER\_DN  
WP\_GASTRIC\_CANCER\_NETWORK\_2, WP\_GASTRIC\_CANCER\_NETWORK\_2  
CONCANNON\_APOPTOSIS\_BY\_EPOXOMICIN\_DN, CONCANNON\_APOPTOSIS\_BY\_EPOXOMICIN\_DN  
BIOCARTA\_MPR\_PATHWAY, BIOCARTA\_MPR\_PATHWAY  
KEGG\_P53\_SIGNALING\_PATHWAY, KEGG\_P53\_SIGNALING\_PATHWAY  
BIOCARTA\_P27\_PATHWAY, BIOCARTA\_P27\_PATHWAY  
CAIRO\_PML\_TARGETS\_BOUND\_BY\_MYC\_UP, CAIRO\_PML\_TARGETS\_BOUND\_BY\_MYC\_UP  
RIEGE\_DELTANP63\_DIRECT\_TARGETS\_UP, RIEGE\_DELTANP63\_DIRECT\_TARGETS\_UP  
HUTTMANN\_B\_CLL\_POOR\_SURVIVAL\_DN, HUTTMANN\_B\_CLL\_POOR\_SURVIVAL\_DN  
HAHTOLA\_MYCOSIS\_FUNGOIDES\_SKIN\_DN, HAHTOLA\_MYCOSIS\_FUNGOIDES\_SKIN\_DN  
LANDIS\_ERBB2\_BREAST\_TUMORS\_324\_UP, LANDIS\_ERBB2\_BREAST\_TUMORS\_324\_UP  
REACTOME\_UNWINDING\_OF\_DNA, REACTOME\_UNWINDING\_OF\_DNA  
PID\_ECADHERIN\_NASCENT\_AI\_PATHWAY, PID\_ECADHERIN\_NASCENT\_AI\_PATHWAY  
REACTOME\_BASE\_EXCISION\_REPAIR\_AP\_SITE\_FORMATION, REACTOME\_BASE\_EXCISION\_REPAIR\_AP\_SITE\_FORMATION  
MATZUK\_SPERMATOCYTE, MATZUK\_SPERMATOCYTE  
KEGG\_PROGESTERONE\_MEDIATED\_OOCYTE\_MATURATION, KEGG\_PROGESTERONE\_MEDIATED\_OOCYTE\_MATURATION  
WP\_MIRNA\_REGULATION\_OF\_DNA\_DAMAGE\_RESPONSE, WP\_MIRNA\_REGULATION\_OF\_DNA\_DAMAGE\_RESPONSE  
TURASHVILI\_BREAST\_DUCTAL\_CARCINOMA\_VS\_LOBULAR\_NORMAL\_UP, TURASHVILI\_BREAST\_DUCTAL\_CARCINOMA\_VS\_LOBULAR\_NORMAL\_UP  
STREICHER\_LSM1\_TARGETS\_UP, STREICHER\_LSM1\_TARGETS\_UP  
BIOCARTA\_CELL\_CYCLE\_PATHWAY, BIOCARTA\_CELL\_CYCLE\_PATHWAY  
STEIN\_ESR1\_TARGETS, STEIN\_ESR1\_TARGETS  
CROONQUIST\_NRAS\_VS\_STROMAL\_STIMULATION\_DN, CROONQUIST\_NRAS\_VS\_STROMAL\_STIMULATION\_DN  
REACTOME\_PROCESSIVE\_SYNTHESIS\_ON\_THE\_C\_STRAND\_OF\_THE\_TELOMERE, REACTOME\_PROCESSIVE\_SYNTHESIS\_ON\_THE\_C\_STRAND\_OF\_THE\_TELOMERE  
REACTOME\_RAC2\_GTPASE\_CYCLE, REACTOME\_RAC2\_GTPASE\_CYCLE  
REACTOME\_RECOGNITION\_AND\_ASSOCIATION\_OF\_DNA\_GLYCOSYLASE\_WITH\_SITE\_CONTAINING\_AN\_AFFECTED\_PURINE, REACTOME\_RECOGNITION\_AND\_ASSOCIATION\_OF\_DNA\_GLYCOSYLASE\_WITH\_SITE\_CONTAINING\_AN\_AFFECTED\_PURINE  
WILCOX\_RESPONSE\_TO\_PROGESTERONE\_UP, WILCOX\_RESPONSE\_TO\_PROGESTERONE\_UP  
KEGG\_MISMATCH\_REPAIR, KEGG\_MISMATCH\_REPAIR  
REACTOME\_POLYMERASE\_SWITCHING\_ON\_THE\_C\_STRAND\_OF\_THE\_TELOMERE, REACTOME\_POLYMERASE\_SWITCHING\_ON\_THE\_C\_STRAND\_OF\_THE\_TELOMERE  
BENPORATH\_ES\_2, BENPORATH\_ES\_2  
NIKOLSKY\_BREAST\_CANCER\_RQ12\_Q22\_AMPICON, NIKOLSKY\_BREAST\_CANCER\_RQ12\_Q22\_AMPICON  
REACTOME\_ABERRANT\_REGULATION\_OF\_MITOTIC\_EXIT\_IN\_CANCER\_DUE\_TO\_RB1\_DEFECTS, REACTOME\_ABERRANT\_REGULATION\_OF\_MITOTIC\_EXIT\_IN\_CANCER\_DUE\_TO\_RB1\_DEFECTS  
FINETTI\_BREAST\_CANCER\_KINOME\_RED, FINETTI\_BREAST\_CANCER\_KINOME\_RED  
MALIK\_REPRESSED\_BY\_ESTROGEN, MALIK\_REPRESSED\_BY\_ESTROGEN  
FERRANDO\_TALL1\_NEIGHBORS, FERRANDO\_TALL1\_NEIGHBORS  
REACTOME\_CYCLIN\_A\_B1\_B2\_ASSOCIATED\_EVENTS\_DURING\_G2\_M\_TRANSITION, REACTOME\_CYCLIN\_A\_B1\_B2\_ASSOCIATED\_EVENTS\_DURING\_G2\_M\_TRANSITION  
TANG\_SENESCENCE\_TP53\_TARGETS\_DN, TANG\_SENESCENCE\_TP53\_TARGETS\_DN  
REACTOME\_POLYMERASE\_SWITCHING, REACTOME\_POLYMERASE\_SWITCHING  
BIOCARTA\_SKP2ZF\_PATHWAY, BIOCARTA\_SKP2ZF\_PATHWAY  
KAN\_RESPONSE\_TO\_ARSENIC\_TRIOXIDE, KAN\_RESPONSE\_TO\_ARSENIC\_TRIOXIDE  
ZHAN\_EARLY\_DIFFERENTIATION\_GENES\_DN, ZHAN\_EARLY\_DIFFERENTIATION\_GENES\_DN  
GOLUB\_ALL\_VS\_AML\_UP, GOLUB\_ALL\_VS\_AML\_UP  
PID\_CASPASE\_PATHWAY, PID\_CASPASE\_PATHWAY  
REACTOME\_LAGGING\_STRAND\_SYNTHESIS, REACTOME\_LAGGING\_STRAND\_SYNTHESIS  
PID\_CIRCADIAN\_PATHWAY, PID\_CIRCADIAN\_PATHWAY  
BIOCARTA\_ATRBRCA\_PATHWAY, BIOCARTA\_ATRBRCA\_PATHWAY  
BIOCARTA\_SRCRPT\_PATHWAY, BIOCARTA\_SRCRPT\_PATHWAY  
PIEPOLL\_LG11\_TARGETS\_UP, PIEPOLL\_LG11\_TARGETS\_UP  
BONCL\_TARGETS\_OF\_MIR15A\_AND\_MIR16\_1, BONCL\_TARGETS\_OF\_MIR15A\_AND\_MIR16\_1  
REACTOME\_MATURATION\_OF\_SARS\_COV\_2\_SPIKE\_PROTEIN, REACTOME\_MATURATION\_OF\_SARS\_COV\_2\_SPIKE\_PROTEIN  
LY\_AGING\_MIDDLE\_DN, LY\_AGING\_MIDDLE\_DN  
REACTOME\_POLO\_LIKE\_KINASE\_MEDIATED\_EVENTS, REACTOME\_POLO\_LIKE\_KINASE\_MEDIATED\_EVENTS  
PIONTEK\_PKD1\_TARGETS\_DN, PIONTEK\_PKD1\_TARGETS\_DN  
BIOCARTA\_BARD1\_PATHWAY, BIOCARTA\_BARD1\_PATHWAY  
DAVICIONI\_RHABDOMYOSARCOMA\_PAX\_FOXO1\_FUSION\_UP, DAVICIONI\_RHABDOMYOSARCOMA\_PAX\_FOXO1\_FUSION\_UP  
SIG\_PIP3\_SIGNALING\_IN\_CARDIAC\_MYOCYTES, SIG\_PIP3\_SIGNALING\_IN\_CARDIAC\_MYOCYTES  
GUO\_HEX\_TARGETS\_DN, GUO\_HEX\_TARGETS\_DN  
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  
FLOTHO\_PEDIATRIC\_ALL\_THERAPY\_RESPONSE, FLOTHO\_PEDIATRIC\_ALL\_THERAPY\_RESPONSE  
SCHAEFFER\_PROSTATE\_DEVELOPMENT\_AND\_CANCER\_BOX1\_UP, SCHAEFFER\_PROSTATE\_DEVELOPMENT\_AND\_CANCER\_BOX1\_UP  
SEMBA\_FHIT\_TARGETS\_DN, SEMBA\_FHIT\_TARGETS\_DN  
JAEGER\_METASTASIS\_UP, JAEGER\_METASTASIS\_UP