```
SOTIRIOU_BREAST_CANCER_GRADE_1_VS_3_UP, SOTIRIOU_BREAST_CANCER_GRADE_1_VS_3_UP
                                                            ROSTY CERVICAL CANCER PROLIFERATION CLUSTER, ROSTY CERVICAL CANCER PROLIFERATION CLUSTER
                                                           REACTOME_DNA_REPLICATION, REACTOME_DNA_REPLICATION
                                                           REACTOME S PHASE, REACTOME S PHASE
                                                           PUJANA_BRCA_CENTERED_NETWORK, PUJANA_BRCA_CENTERED_NETWORK
                                                           REACTOME_G2_M_CHECKPOINTS, REACTOME_G2_M_CHECKPOINTS
                                                           KONG E2F3 TARGETS, KONG E2F3 TARGETS
                                                            REACTOME_SEPARATION_OF_SISTER_CHROMATIDS, REACTOME_SEPARATION_OF_SISTER_CHROMATIDS
                                                           FUJII_YBX1_TARGETS_DN, FUJII_YBX1_TARGETS_DN
                                                            WP_DNA_REPAIR_PATHWAYS_FULL_NETWORK, WP_DNA_REPAIR_PATHWAYS_FULL_NETWORK
                                                           REACTOME_DNA_DOUBLE_STRAND_BREAK_REPAIR, REACTOME_DNA_DOUBLE_STRAND_BREAK_REPAIR
                                                           REACTOME_MITOTIC_G2_G2_M_PHASES, REACTOME_MITOTIC_G2_G2_M_PHASES
                                                           WINNEPENNINCKX MELANOMA METASTASIS UP, WINNEPENNINCKX MELANOMA METASTASIS UP
                                                           BENPORATH_PROLIFERATION, BENPORATH_PROLIFERATION
                                                           REACTOME_MITOTIC_G1_PHASE_AND_G1_S_TRANSITION, REACTOME_MITOTIC_G1_PHASE_AND_G1_S_TRANSITION
                                                           REACTOME_HOMOLOGY_DIRECTED_REPAIR, REACTOME_HOMOLOGY_DIRECTED_REPAIR
                                                           KAUFFMANN_MELANOMA_RELAPSE_UP, KAUFFMANN_MELANOMA_RELAPSE_UP
                                                           REACTOME_SWITCHING_OF_ORIGINS_TO_A_POST_REPLICATIVE_STATE, REACTOME_SWITCHING_OF_ORIGINS_TO_A_POST_REPLICATIVE_STATE
                                                           GARCIA_TARGETS_OF_FLI1_AND_DAX1_DN, GARCIA_TARGETS_OF_FLI1_AND_DAX1_DN
                                                           REACTOME_MITOTIC_SPINDLE_CHECKPOINT, REACTOME_MITOTIC_SPINDLE_CHECKPOINT
                                                           KAUFFMANN_DNA_REPLICATION_GENES, KAUFFMANN_DNA_REPLICATION_GENES
                                                           HOFFMANN_LARGE_TO_SMALL_PRE_BII_LYMPHOCYTE_UP, HOFFMANN_LARGE_TO_SMALL_PRE_BII_LYMPHOCYTE_UP
                                                           FERREIRA EWINGS SARCOMA UNSTABLE VS STABLE UP, FERREIRA EWINGS SARCOMA UNSTABLE VS STABLE UP
                                                            MORI_EMU_MYC_LYMPHOMA_BY_ONSET_TIME_UP, MORI_EMU_MYC_LYMPHOMA_BY_ONSET_TIME_UP
                                                           REACTOME_DNA_REPLICATION_PRE_INITIATION, REACTOME_DNA_REPLICATION_PRE_INITIATION
                                                           BLANCO MELO BRONCHIAL EPITHELIAL CELLS INFLUENZA A DEL NS1 INFECTION DN, BLANCO MELO BRONCHIAL EPITHELIAL CELLS INFLUENZA A DEL NS1 INFECTION DN
                                                           VILLANUEVA_LIVER_CANCER_KRT19_UP, VILLANUEVA_LIVER_CANCER_KRT19_UP
                                                           MORI_IMMATURE_B_LYMPHOCYTE_DN, MORI_IMMATURE_B_LYMPHOCYTE_DN
                                                           REACTOME REGULATION OF TP53 ACTIVITY, REACTOME REGULATION OF TP53 ACTIVITY
                                                           FLORIO_NEOCORTEX_BASAL_RADIAL_GLIA_DN, FLORIO_NEOCORTEX_BASAL_RADIAL_GLIA_DN
                                                           MORI_LARGE_PRE_BII_LYMPHOCYTE_UP, MORI_LARGE_PRE_BII_LYMPHOCYTE_UP
                                                           REACTOME_APC_C_MEDIATED_DEGRADATION_OF_CELL_CYCLE_PROTEINS, REACTOME_APC_C_MEDIATED_DEGRADATION_OF_CELL_CYCLE_PROTEINS
                                                           CROONQUIST_IL6_DEPRIVATION_DN, CROONQUIST_IL6_DEPRIVATION_DN
                                                           WHITEFORD_PEDIATRIC_CANCER_MARKERS, WHITEFORD_PEDIATRIC_CANCER_MARKERS
                                                           WP_DNA_IRDAMAGE_AND_CELLULAR_RESPONSE_VIA_ATR, WP_DNA_IRDAMAGE_AND_CELLULAR_RESPONSE_VIA_ATR
                                                           REACTOME_ACTIVATION_OF_ATR_IN_RESPONSE_TO_REPLICATION_STRESS, REACTOME_ACTIVATION_OF_ATR_IN_RESPONSE_TO_REPLICATION_STRESS
                                                           REACTOME_ORC1_REMOVAL_FROM_CHROMATIN, REACTOME_ORC1_REMOVAL_FROM_CHROMATIN
                                                           DAZARD_UV_RESPONSE_CLUSTER_G6, DAZARD_UV_RESPONSE_CLUSTER_G6
                                                           REN_BOUND_BY_E2F, REN_BOUND_BY_E2F
                                                           REACTOME RESOLUTION OF SISTER CHROMATID COHESION, REACTOME RESOLUTION OF SISTER CHROMATID COHESION
                                                           CROONQUIST_NRAS_SIGNALING_DN, CROONQUIST_NRAS_SIGNALING_DN
                                                           REACTOME_HDR_THROUGH_HOMOLOGOUS_RECOMBINATION_HRR, REACTOME_HDR_THROUGH_HOMOLOGOUS_RECOMBINATION_HRR
                                                           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\_APC\_C\_CDH1\_MEDIATED\_DEGRADATION\_OF\_CDC20\_AND\_OTHER\_APC\_C\_CDH1\_TARGETED\_PROTEINS\_IN\_LATE\_MITOSIS\_EARLY\_G1
                                                           ZHOU_CELL_CYCLE_GENES_IN_IR_RESPONSE_24HR, ZHOU_CELL_CYCLE_GENES_IN_IR_RESPONSE_24HR
                                                           PUJANA BREAST CANCER WITH BRCA1 MUTATED UP, PUJANA BREAST CANCER WITH BRCA1 MUTATED UP
                                                           WAKASUGI_HAVE_ZNF143_BINDING_SITES, WAKASUGI_HAVE_ZNF143_BINDING_SITES
                                                           GRAHAM_CML_DIVIDING_VS_NORMAL_QUIESCENT_UP, GRAHAM_CML_DIVIDING_VS_NORMAL_QUIESCENT_UP
                                                           WP_DNA_REPLICATION, WP_DNA_REPLICATION
                                                           UDAYAKUMAR_MED1_TARGETS_UP, UDAYAKUMAR_MED1_TARGETS_UP
                                                           PUJANA_BREAST_CANCER_LIT_INT_NETWORK, PUJANA_BREAST_CANCER_LIT_INT_NETWORK
                                                            SARRIO_EPITHELIAL_MESENCHYMAL_TRANSITION_UP, SARRIO_EPITHELIAL_MESENCHYMAL_TRANSITION_UP
                                                            REACTOME_PROCESSING_OF_DNA_DOUBLE_STRAND_BREAK_ENDS, REACTOME_PROCESSING_OF_DNA_DOUBLE_STRAND_BREAK_ENDS
                                                            KEGG_CELL_CYCLE, KEGG_CELL_CYCLE
                                                            ZHOU_CELL_CYCLE_GENES_IN_IR_RESPONSE_6HR, ZHOU_CELL_CYCLE_GENES_IN_IR_RESPONSE_6HR
                                                           WP_RETINOBLASTOMA_GENE_IN_CANCER, WP_RETINOBLASTOMA_GENE_IN_CANCER
                                                            REACTOME_G2_M_DNA_DAMAGE_CHECKPOINT, REACTOME_G2_M_DNA_DAMAGE_CHECKPOINT
                                                           REACTOME_EPIGENETIC_REGULATION_OF_GENE_EXPRESSION, REACTOME_EPIGENETIC_REGULATION_OF_GENE_EXPRESSION
                                                            REACTOME_EXTENSION_OF_TELOMERES, REACTOME_EXTENSION_OF_TELOMERES
                                                           BURTON_ADIPOGENESIS_3, BURTON_ADIPOGENESIS_3
                                                           WP_NUCLEOTIDE_EXCISION_REPAIR, WP_NUCLEOTIDE_EXCISION_REPAIR
                                                           ODONNELL_TFRC_TARGETS_DN, ODONNELL_TFRC_TARGETS_DN
                                                            REACTOME_REGULATION_OF_TP53_ACTIVITY_THROUGH_PHOSPHORYLATION, REACTOME_REGULATION_OF_TP53_ACTIVITY_THROUGH_PHOSPHORYLATION
                                                           REACTOME_CYCLIN_A_CDK2_ASSOCIATED_EVENTS_AT_S_PHASE_ENTRY, REACTOME_CYCLIN_A_CDK2_ASSOCIATED_EVENTS_AT_S_PHASE_ENTRY
                                                           KANG_DOXORUBICIN_RESISTANCE_UP, KANG_DOXORUBICIN_RESISTANCE_UP
                                                           KEGG_NUCLEOTIDE_EXCISION_REPAIR, KEGG_NUCLEOTIDE_EXCISION_REPAIR
                                                           REACTOME_MITOTIC_PROPHASE, REACTOME_MITOTIC_PROPHASE
                                                            REACTOME_HOMOLOGOUS_DNA_PAIRING_AND_STRAND_EXCHANGE, REACTOME_HOMOLOGOUS_DNA_PAIRING_AND_STRAND_EXCHANGE
                                                            SCHLOSSER_SERUM_RESPONSE_AUGMENTED_BY_MYC, SCHLOSSER_SERUM_RESPONSE_AUGMENTED_BY_MYC
                                                           WP_CELL_CYCLE, WP_CELL_CYCLE
                                                           SONG_TARGETS_OF_IE86_CMV_PROTEIN, SONG_TARGETS_OF_IE86_CMV_PROTEIN
                                                           REACTOME_ACTIVATION_OF_THE_PRE_REPLICATIVE_COMPLEX, REACTOME_ACTIVATION_OF_THE_PRE_REPLICATIVE_COMPLEX
                                                           HESS_TARGETS_OF_HOXA9_AND_MEIS1_UP, HESS_TARGETS_OF_HOXA9_AND_MEIS1_UP
                                                           REACTOME_RHO_GTPASES_ACTIVATE_FORMINS, REACTOME_RHO_GTPASES_ACTIVATE_FORMINS
                                                           WHITFIELD_CELL_CYCLE_M_G1, WHITFIELD_CELL_CYCLE_M_G1
                                                            REACTOME_AURKA_ACTIVATION_BY_TPX2, REACTOME_AURKA_ACTIVATION_BY_TPX2
                                                           LEE_EARLY_T_LYMPHOCYTE_UP, LEE_EARLY_T_LYMPHOCYTE_UP
                                                           REACTOME_DNA_STRAND_ELONGATION, REACTOME_DNA_STRAND_ELONGATION
                                                           WHITFIELD_CELL_CYCLE_S, WHITFIELD_CELL_CYCLE_S
                                                           PYEON_CANCER_HEAD_AND_NECK_VS_CERVICAL_UP, PYEON_CANCER_HEAD_AND_NECK_VS_CERVICAL_UP
                                                            GAZDA_DIAMOND_BLACKFAN_ANEMIA_PROGENITOR_DN, GAZDA_DIAMOND_BLACKFAN_ANEMIA_PROGENITOR_DN
                                                            REACTOME BASE EXCISION REPAIR, REACTOME BASE EXCISION REPAIR
                                                            REACTOME_DNA_DAMAGE_TELOMERE_STRESS_INDUCED_SENESCENCE, REACTOME_DNA_DAMAGE_TELOMERE_STRESS_INDUCED_SENESCENCE
                                                            KEGG_DNA_REPLICATION, KEGG_DNA_REPLICATION
                                                           GRAHAM_NORMAL_QUIESCENT_VS_NORMAL_DIVIDING_DN, GRAHAM_NORMAL_QUIESCENT_VS_NORMAL_DIVIDING_DN
                                                            REACTOME_CELLULAR_SENESCENCE, REACTOME_CELLULAR_SENESCENCE
                                                           REACTOME_TELOMERE_C_STRAND_LAGGING_STRAND_SYNTHESIS, REACTOME_TELOMERE_C_STRAND_LAGGING_STRAND_SYNTHESIS
                                                            REACTOME_HDR_THROUGH_SINGLE_STRAND_ANNEALING_SSA, REACTOME_HDR_THROUGH_SINGLE_STRAND_ANNEALING_SSA
                                                           ODONNELL_TARGETS_OF_MYC_AND_TFRC_DN, ODONNELL_TARGETS_OF_MYC_AND_TFRC_DN
                                                           CHIANG_LIVER_CANCER_SUBCLASS_PROLIFERATION_UP, CHIANG_LIVER_CANCER_SUBCLASS_PROLIFERATION_UP
                                                           WHITFIELD_CELL_CYCLE_G1_S, WHITFIELD_CELL_CYCLE_G1_S
                                                           WHITFIELD_CELL_CYCLE_G2, WHITFIELD_CELL_CYCLE_G2
                                                           CHEMNITZ_RESPONSE_TO_PROSTAGLANDIN_E2_UP, CHEMNITZ_RESPONSE_TO_PROSTAGLANDIN_E2_UP
                                                            PID_FANCONI_PATHWAY, PID_FANCONI_PATHWAY
                                                           WU_APOPTOSIS_BY_CDKN1A_VIA_TP53, WU_APOPTOSIS_BY_CDKN1A_VIA_TP53
                                                           FISCHER_G1_S_CELL_CYCLE, FISCHER_G1_S_CELL_CYCLE
                                                           FRASOR_RESPONSE_TO_SERM_OR_FULVESTRANT_DN, FRASOR_RESPONSE_TO_SERM_OR_FULVESTRANT_DN
                                                           REACTOME_DUAL_INCISION_IN_GG_NER, REACTOME_DUAL_INCISION_IN_GG_NER
                                                           WP_INTEGRATED_BREAST_CANCER_PATHWAY, WP_INTEGRATED_BREAST_CANCER_PATHWAY
                                                           PID_P53_REGULATION_PATHWAY, PID_P53_REGULATION_PATHWAY
                                                           WP_SIGNALING_PATHWAYS_IN_GLIOBLASTOMA, WP_SIGNALING_PATHWAYS_IN_GLIOBLASTOMA
                                                           WHITFIELD_CELL_CYCLE_G2_M, WHITFIELD_CELL_CYCLE_G2_M
                                                            RIZ ERYTHROID DIFFERENTIATION, RIZ ERYTHROID DIFFERENTIATION
                                                           ISHIDA_E2F_TARGETS, ISHIDA_E2F_TARGETS
                                                           LE_EGR2_TARGETS_UP, LE_EGR2_TARGETS_UP
                                                            REACTOME_CONDENSATION_OF_PROPHASE_CHROMOSOMES, REACTOME_CONDENSATION_OF_PROPHASE_CHROMOSOMES
                                                           PID_ATM_PATHWAY, PID_ATM_PATHWAY
                                                           WHITFIELD_CELL_CYCLE_LITERATURE, WHITFIELD_CELL_CYCLE_LITERATURE
                                                            REACTOME_DISEASES_OF_PROGRAMMED_CELL_DEATH, REACTOME_DISEASES_OF_PROGRAMMED_CELL_DEATH
                                                            KAMMINGA_EZH2_TARGETS, KAMMINGA_EZH2_TARGETS
                                                            RUIZ_TNC_TARGETS_DN, RUIZ_TNC_TARGETS_DN
                                                           PID_ATR_PATHWAY, PID_ATR_PATHWAY
                                                           REACTOME NONHOMOLOGOUS END JOINING NHEJ, REACTOME NONHOMOLOGOUS END JOINING NHEJ
                                                           LY AGING OLD DN, LY AGING OLD DN
                                                            BROWNE_HCMV_INFECTION_14HR_UP, BROWNE_HCMV_INFECTION_14HR_UP
                                                           REACTOME_MEIOSIS, REACTOME_MEIOSIS
                                                           WP_DNA_IRDOUBLE_STRAND_BREAKS_DSBS_AND_CELLULAR_RESPONSE_VIA_ATM, WP_DNA_IRDOUBLE_STRAND_BREAKS_DSBS_AND_CELLULAR_RESPONSE_VIA_ATM
                                                           NAKAMURA_CANCER_MICROENVIRONMENT_DN, NAKAMURA_CANCER_MICROENVIRONMENT_DN
                                                           REACTOME_POLYMERASE_SWITCHING_ON_THE_C_STRAND_OF_THE_TELOMERE, REACTOME_POLYMERASE_SWITCHING_ON_THE_C_STRAND_OF_THE_TELOMERE
                                                            YU_MYC_TARGETS_UP, YU_MYC_TARGETS_UP
                                                            REACTOME_FANCONI_ANEMIA_PATHWAY, REACTOME_FANCONI_ANEMIA_PATHWAY
                                                            REACTOME_RESOLUTION_OF_ABASIC_SITES_AP_SITES, REACTOME_RESOLUTION_OF_ABASIC_SITES_AP_SITES
                                                            BIOCARTA_MCM_PATHWAY, BIOCARTA_MCM_PATHWAY
                                                            REACTOME_DNA_DAMAGE_BYPASS, REACTOME_DNA_DAMAGE_BYPASS
                                                           WP_DNA_DAMAGE_RESPONSE, WP_DNA_DAMAGE_RESPONSE
                                                            SASAKI_ADULT_T_CELL_LEUKEMIA, SASAKI_ADULT_T_CELL_LEUKEMIA
                                                           ZHAN_MULTIPLE_MYELOMA_PR_UP, ZHAN_MULTIPLE_MYELOMA_PR_UP
                                                           REACTOME_RESOLUTION_OF_D_LOOP_STRUCTURES, REACTOME_RESOLUTION_OF_D_LOOP_STRUCTURES
                                                            REACTOME_RESOLUTION_OF_AP_SITES_VIA_THE_MULTIPLE_NUCLEOTIDE_PATCH_REPLACEMENT_PATHWAY, REACTOME_RESOLUTION_OF_AP_SITES_VIA_THE_MULTIPLE_NUCLEOTIDE_PATCH_REPLACEMENT_PATHWAY
                                                            VANHARANTA_UTERINE_FIBROID_WITH_7Q_DELETION_UP, VANHARANTA_UTERINE_FIBROID_WITH_7Q_DELETION_UP
                                                           WP_DNA_MISMATCH_REPAIR, WP_DNA_MISMATCH_REPAIR
                                                            REACTOME_PRC2_METHYLATES_HISTONES_AND_DNA, REACTOME_PRC2_METHYLATES_HISTONES_AND_DNA
                                                            VERNELL_RETINOBLASTOMA_PATHWAY_UP, VERNELL_RETINOBLASTOMA_PATHWAY_UP
                                                            REACTOME_MEIOTIC_RECOMBINATION, REACTOME_MEIOTIC_RECOMBINATION
                                                            YAGI_AML_FAB_MARKERS, YAGI_AML_FAB_MARKERS
                                                            BOYAULT_LIVER_CANCER_SUBCLASS_G23_UP, BOYAULT_LIVER_CANCER_SUBCLASS_G23_UP
                                                            PID_BARD1_PATHWAY, PID_BARD1_PATHWAY
                                                           KEGG_MISMATCH_REPAIR, KEGG_MISMATCH_REPAIR
                                                            REACTOME_MEIOTIC_SYNAPSIS, REACTOME_MEIOTIC_SYNAPSIS
                                                            PEART_HDAC_PROLIFERATION_CLUSTER_DN, PEART_HDAC_PROLIFERATION_CLUSTER_DN
                                                            REACTOME_DNA_DOUBLE_STRAND_BREAK_RESPONSE, REACTOME_DNA_DOUBLE_STRAND_BREAK_RESPONSE
                                                            TANG_SENESCENCE_TP53_TARGETS_DN, TANG_SENESCENCE_TP53_TARGETS_DN
                                                            REACTOME_RESOLUTION_OF_D_LOOP_STRUCTURES_THROUGH_SYNTHESIS_DEPENDENT_STRAND_ANNEALING_SDSA, REACTOME_RESOLUTION_OF_D_LOOP_STRUCTURES_THROUGH_SYNTHESIS_DEPENDENT_STRAND_ANNEALING_SDSA
                                                            KEGG_HOMOLOGOUS_RECOMBINATION, KEGG_HOMOLOGOUS_RECOMBINATION
                                                            DE_YY1_TARGETS_DN, DE_YY1_TARGETS_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
                                                            REACTOME_LAGGING_STRAND_SYNTHESIS, REACTOME_LAGGING_STRAND_SYNTHESIS
                                                           REACTOME_UNWINDING_OF_DNA, REACTOME_UNWINDING_OF_DNA
SS_INT_NETWORK, PUJANA_XPRSS_INT_NETWORK
                                                           SMIRNOV_RESPONSE_TO_IR_6HR_DN, SMIRNOV_RESPONSE_TO_IR_6HR_DN
                                                           WP_MIRNA_REGULATION_OF_DNA_DAMAGE_RESPONSE, WP_MIRNA_REGULATION_OF_DNA_DAMAGE_RESPONSE
                                                            LIU_VMYB_TARGETS_UP, LIU_VMYB_TARGETS_UP
                                                            MOLENAAR_TARGETS_OF_CCND1_AND_CDK4_DN, MOLENAAR_TARGETS_OF_CCND1_AND_CDK4_DN
                                                            PID_P73PATHWAY, PID_P73PATHWAY
                                                            CAFFAREL_RESPONSE_TO_THC_DN, CAFFAREL_RESPONSE_TO_THC_DN
                                                            GAVIN_FOXP3_TARGETS_CLUSTER_T7, GAVIN_FOXP3_TARGETS_CLUSTER_T7
                                                            REACTOME_PCNA_DEPENDENT_LONG_PATCH_BASE_EXCISION_REPAIR, REACTOME_PCNA_DEPENDENT_LONG_PATCH_BASE_EXCISION_REPAIR
                                                            REACTOME APC C CDC20 MEDIATED DEGRADATION OF CYCLIN B, REACTOME APC C CDC20 MEDIATED DEGRADATION OF CYCLIN B
                                                            KEGG_BASE_EXCISION_REPAIR, KEGG_BASE_EXCISION_REPAIR
                                                            FARMER BREAST CANCER CLUSTER 2, FARMER BREAST CANCER CLUSTER 2
                                                            REACTOME_RECOGNITION_OF_DNA_DAMAGE_BY_PCNA_CONTAINING_REPLICATION_COMPLEX, REACTOME_RECOGNITION_OF_DNA_DAMAGE_BY_PCNA_CONTAINING_REPLICATION_COMPLEX
                                                            THILLAINADESAN_ZNF217_TARGETS_UP, THILLAINADESAN_ZNF217_TARGETS_UP
                                                            KEGG OOCYTE MEIOSIS, KEGG OOCYTE MEIOSIS
                                                            MARZEC_IL2_SIGNALING_DN, MARZEC_IL2_SIGNALING_DN
                                                            ZAMORA_NOS2_TARGETS_UP, ZAMORA_NOS2_TARGETS_UP
                                                            STEIN_ESRRA_TARGETS_RESPONSIVE_TO_ESTROGEN_DN, STEIN_ESRRA_TARGETS_RESPONSIVE_TO_ESTROGEN_DN
                                                            GEORGES_CELL_CYCLE_MIR192_TARGETS, GEORGES_CELL_CYCLE_MIR192_TARGETS
                                                            REACTOME_TRANSCRIPTIONAL_REGULATION_OF_GRANULOPOIESIS, REACTOME_TRANSCRIPTIONAL_REGULATION_OF_GRANULOPOIESIS
                                                            WILCOX_RESPONSE_TO_PROGESTERONE_UP, WILCOX_RESPONSE_TO_PROGESTERONE_UP
                                                            PEART_HDAC_PROLIFERATION_CLUSTER_UP, PEART_HDAC_PROLIFERATION_CLUSTER_UP
                                                            REACTOME POLYMERASE SWITCHING, REACTOME POLYMERASE SWITCHING
                                                            REICHERT_MITOSIS_LIN9_TARGETS, REICHERT_MITOSIS_LIN9_TARGETS
                                                            PID_P53_DOWNSTREAM_PATHWAY, PID_P53_DOWNSTREAM_PATHWAY
                                                            CAFFAREL_RESPONSE_TO_THC_24HR_5_DN, CAFFAREL_RESPONSE_TO_THC_24HR_5_DN
                                                            BURTON_ADIPOGENESIS_PEAK_AT_16HR, BURTON_ADIPOGENESIS_PEAK_AT_16HR
                                                            EGUCHI_CELL_CYCLE_RB1_TARGETS, EGUCHI_CELL_CYCLE_RB1_TARGETS
                                                            REACTOME_PROCESSIVE_SYNTHESIS_ON_THE_C_STRAND_OF_THE_TELOMERE, REACTOME_PROCESSIVE_SYNTHESIS_ON_THE_C_STRAND_OF_THE_TELOMERE
                                                            PID_PLK1_PATHWAY, PID_PLK1_PATHWAY
                                                            BROWNE HCMV_INFECTION_24HR_UP, BROWNE_HCMV_INFECTION_24HR_UP
                                                           GARGALOVIC_RESPONSE_TO_OXIDIZED_PHOSPHOLIPIDS_TURQUOISE_DN, GARGALOVIC_RESPONSE_TO_OXIDIZED_PHOSPHOLIPIDS_TURQUOISE_DN
                                                            WP_INTEGRATED_CANCER_PATHWAY, WP_INTEGRATED_CANCER_PATHWAY
                                                           REACTOME_GAP_FILLING_DNA_REPAIR_SYNTHESIS_AND_LIGATION_IN_GG_NER, REACTOME_GAP_FILLING_DNA_REPAIR_SYNTHESIS_AND_LIGATION_IN_GG_NER
                                                            WP_BASE_EXCISION_REPAIR, WP_BASE_EXCISION_REPAIR
                                                            REACTOME_E2F_MEDIATED_REGULATION_OF_DNA_REPLICATION, REACTOME_E2F_MEDIATED_REGULATION_OF_DNA_REPLICATION
                                                            REACTOME_TRANSCRIPTIONAL_REGULATION_BY_E2F6, REACTOME_TRANSCRIPTIONAL_REGULATION_BY_E2F6
                                                            REACTOME_APC_CDC20_MEDIATED_DEGRADATION_OF_NEK2A, REACTOME_APC_CDC20_MEDIATED_DEGRADATION_OF_NEK2A
                                                            BIOCARTA_HIVNEF_PATHWAY, BIOCARTA_HIVNEF_PATHWAY
                                                            PYEON_HPV_POSITIVE_TUMORS_UP, PYEON_HPV_POSITIVE_TUMORS_UP
                                                            REACTOME INHIBITION OF THE PROTEOLYTIC ACTIVITY OF APC C REQUIRED FOR THE ONSET OF ANAPHASE BY MITOTIC SPINDLE CHECKPOINT COMPONENTS, REACTOME INHIBITION OF THE PROTEOLYTIC ACTIVITY OF APC C REQUIRED FOR THE ONSET OF ANAPHASE BY MITOTIC SPINDLE CHECKPOINT COMPONENTS, REACTOME INHIBITION OF THE PROTEOLYTIC ACTIVITY OF APC C REQUIRED FOR THE ONSET OF ANAPHASE BY MITOTIC SPINDLE CHECKPOINT COMPONENTS, REACTOME INHIBITION OF THE PROTEOLYTIC ACTIVITY OF APC C REQUIRED FOR THE ONSET OF ANAPHASE BY MITOTIC SPINDLE CHECKPOINT COMPONENTS, REACTOME INHIBITION OF THE PROTEOLYTIC ACTIVITY OF APC C REQUIRED FOR THE ONSET OF ANAPHASE BY MITOTIC SPINDLE CHECKPOINT COMPONENTS, REACTOME INHIBITION OF THE PROTEOLYTIC ACTIVITY OF APC C REQUIRED FOR THE ONSET OF ANAPHASE BY MITOTIC SPINDLE CHECKPOINT COMPONENTS, REACTOME INHIBITION OF THE PROTEOLYTIC ACTIVITY OF APC C REQUIRED FOR THE ONSET OF ANAPHASE BY MITOTIC SPINDLE CHECKPOINT COMPONENTS, REACTOME INHIBITION OF THE PROTEOLYTIC ACTIVITY OF APC C REQUIRED FOR THE ONSET OF ANAPHASE BY MITOTIC SPINDLE CHECKPOINT COMPONENTS, REACTOME INHIBITION OF THE PROTEOLYTIC ACTIVITY OF APC C REQUIRED FOR THE ONSET OF ANAPHASE BY MITOTIC SPINDLE CHECKPOINT COMPONENTS, REACTOME INHIBITION OF THE PROTEOLYTIC ACTIVITY OF APC C REQUIRED FOR THE ONSET OF ANAPHASE BY MITOTIC SPINDLE CHECKPOINT COMPONENTS, REACTOME INHIBITION OF THE PROTEOLYTIC ACTIVITY OF APC C REQUIRED FOR THE ONSET OF ANAPHASE BY MITOTIC SPINDLE CHECKPOINT COMPONENTS, REACTOME INHIBITION OF THE PROTEOLYTIC ACTIVITY OF APC C REQUIRED FOR THE ONSET OF ANAPHASE BY MITOTIC SPINDLE CHECKPOINT COMPONENTS, REACTOME INHIBITION OF THE PROTEOLYTIC ACTIVITY OF APC C REQUIRED FOR THE ONSET OF ANAPHASE BY MITOTIC SPINDLE CHECKPOINT COMPONENTS.
                                                            BIOCARTA_ATRBRCA_PATHWAY, BIOCARTA_ATRBRCA_PATHWAY
                                                            REACTOME_G1_S_SPECIFIC_TRANSCRIPTION, REACTOME_G1_S_SPECIFIC_TRANSCRIPTION
                                                            REACTOME_PHOSPHORYLATION_OF_THE_APC_C, REACTOME_PHOSPHORYLATION_OF_THE_APC_C
                                                            REACTOME_ABERRANT_REGULATION_OF_MITOTIC_EXIT_IN_CANCER_DUE_TO_RB1_DEFECTS, REACTOME_ABERRANT_REGULATION_OF_MITOTIC_EXIT_IN_CANCER_DUE_TO_RB1_DEFECTS
                                                            REACTOME_REGULATION_OF_TP53_EXPRESSION_AND_DEGRADATION, REACTOME_REGULATION_OF_TP53_EXPRESSION_AND_DEGRADATION
                                                            ZHANG RESPONSE TO IKK INHIBITOR AND TNF DN, ZHANG RESPONSE TO IKK INHIBITOR AND TNF DN
                                                           XU_HGF_TARGETS_INDUCED_BY_AKT1_48HR_DN, XU_HGF_TARGETS_INDUCED_BY_AKT1_48HR_DN
                                                           WP_TUMOR_SUPPRESSOR_ACTIVITY_OF_SMARCB1, WP_TUMOR_SUPPRESSOR_ACTIVITY_OF_SMARCB1
                                                           KALMA_E2F1_TARGETS, KALMA_E2F1_TARGETS
                                                           WP_ATM_SIGNALING_PATHWAY, WP_ATM_SIGNALING_PATHWAY
                                                           REACTOME_TRANSLESION_SYNTHESIS_BY_POLH, REACTOME_TRANSLESION_SYNTHESIS_BY_POLH
                                                            PID_AURORA_A_PATHWAY, PID_AURORA_A_PATHWAY
                                                            REACTOME_TERMINATION_OF_TRANSLESION_DNA_SYNTHESIS, REACTOME_TERMINATION_OF_TRANSLESION_DNA_SYNTHESIS
                                                            YIH_RESPONSE_TO_ARSENITE_C3, YIH_RESPONSE_TO_ARSENITE_C3
                                                           WP_ATM_SIGNALING_NETWORK_IN_DEVELOPMENT_AND_DISEASE, WP_ATM_SIGNALING_NETWORK_IN_DEVELOPMENT_AND_DISEASE
                                                           PID_AURORA_B_PATHWAY, PID_AURORA_B_PATHWAY
                                                           SCIBETTA_KDM5B_TARGETS_DN, SCIBETTA_KDM5B_TARGETS_DN
                                                            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
                                                           WP_G1_TO_S_CELL_CYCLE_CONTROL, WP_G1_TO_S_CELL_CYCLE_CONTROL
                                                           PASQUALUCCI_LYMPHOMA_BY_GC_STAGE_DN, PASQUALUCCI_LYMPHOMA_BY_GC_STAGE_DN
                                                           GENTILE_RESPONSE_CLUSTER_D3, GENTILE_RESPONSE_CLUSTER_D3
                                                           GOLUB_ALL_VS_AML_UP, GOLUB_ALL_VS_AML_UP
                                                           CHOW_RASSF1_TARGETS_UP, CHOW_RASSF1_TARGETS_UP
                                                            REACTOME_CONDENSATION_OF_PROMETAPHASE_CHROMOSOMES, REACTOME_CONDENSATION_OF_PROMETAPHASE_CHROMOSOMES
                                                            ALCALAY_AML_BY_NPM1_LOCALIZATION_DN, ALCALAY_AML_BY_NPM1_LOCALIZATION_DN
                                                            BOYLAN_MULTIPLE_MYELOMA_C_CLUSTER_UP, BOYLAN_MULTIPLE_MYELOMA_C_CLUSTER_UP
                                                            SCIAN_CELL_CYCLE_TARGETS_OF_TP53_AND_TP73_DN, SCIAN_CELL_CYCLE_TARGETS_OF_TP53_AND_TP73_DN
                                                           WP_TRANSSULFURATION_AND_ONE_CARBON_METABOLISM, WP_TRANSSULFURATION_AND_ONE_CARBON_METABOLISM
                                                            REACTOME_REPRODUCTION, REACTOME_REPRODUCTION
                                                            REACTOME_TRANSLESION_SYNTHESIS_BY_POLK, REACTOME_TRANSLESION_SYNTHESIS_BY_POLK
                                                            REACTOME_DISEASES_OF_MITOTIC_CELL_CYCLE, REACTOME_DISEASES_OF_MITOTIC_CELL_CYCLE
                                                           LAU APOPTOSIS CDKN2A UP, LAU APOPTOSIS CDKN2A UP
                                                           DORMOY ELAVL1 TARGETS, DORMOY ELAVL1 TARGETS
                                                            BILD_CTNNB1_ONCOGENIC_SIGNATURE, BILD_CTNNB1_ONCOGENIC_SIGNATURE
                                                            BIOCARTA_TNFR1_PATHWAY, BIOCARTA_TNFR1_PATHWAY
                                                            REACTOME_G0_AND_EARLY_G1, REACTOME_G0_AND_EARLY_G1
                                                            GREENBAUM_E2A_TARGETS_UP, GREENBAUM_E2A_TARGETS_UP
                                                            REACTOME_SIGNALING_BY_TGF_BETA_RECEPTOR_COMPLEX, REACTOME_SIGNALING_BY_TGF_BETA_RECEPTOR_COMPLEX
                                                            BROWNE_HCMV_INFECTION_18HR_UP, BROWNE_HCMV_INFECTION_18HR_UP
                                                           LY_AGING_MIDDLE_DN, LY_AGING_MIDDLE_DN
                                                            REACTOME CYCLIN A B1 B2 ASSOCIATED EVENTS DURING G2 M TRANSITION, REACTOME CYCLIN A B1 B2 ASSOCIATED EVENTS DURING G2 M TRANSITION
                                                            MARKEY_RB1_CHRONIC_LOF_UP, MARKEY_RB1_CHRONIC_LOF_UP
                                                           REACTOME PROCESSIVE SYNTHESIS ON THE LAGGING STRAND, REACTOME PROCESSIVE SYNTHESIS ON THE LAGGING STRAND
                                                            REACTOME_FORMATION_OF_SENESCENCE_ASSOCIATED_HETEROCHROMATIN_FOCI_SAHF, REACTOME_FORMATION_OF_SENESCENCE_ASSOCIATED_HETEROCHROMATIN_FOCI_SAHF
                                                            SMID_BREAST_CANCER_LUMINAL_A_DN, SMID_BREAST_CANCER_LUMINAL_A_DN
                                                           WP_THE_EFFECT_OF_PROGERIN_ON_THE_INVOLVED_GENES_IN_HUTCHINSONGILFORD_PROGERIA_SYNDROME, WP_THE_EFFECT_OF_PROGERIN_ON_THE_INVOLVED_GENES_IN_HUTCHINSONGILFORD_PROGERIA_SYNDROME
                                                            SIMBULAN_PARP1_TARGETS_DN, SIMBULAN_PARP1_TARGETS_DN
                                                            REACTOME SIGNALING BY CYTOSOLIC FGFR1 FUSION MUTANTS, REACTOME SIGNALING BY CYTOSOLIC FGFR1 FUSION MUTANTS
                                                            REACTOME_OXIDATIVE_STRESS_INDUCED_SENESCENCE, REACTOME_OXIDATIVE_STRESS_INDUCED_SENESCENCE
                                                            REACTOME_MISMATCH_REPAIR, REACTOME_MISMATCH_REPAIR
                                                            REACTOME_TRISTETRAPROLIN_TTP_ZFP36_BINDS_AND_DESTABILIZES_MRNA, REACTOME_TRISTETRAPROLIN_TTP_ZFP36_BINDS_AND_DESTABILIZES_MRNA
                                                            TSAI_RESPONSE_TO_IONIZING_RADIATION, TSAI_RESPONSE_TO_IONIZING_RADIATION
                                                            BIOCARTA_IL2_PATHWAY, BIOCARTA_IL2_PATHWAY
                                                            JOHANSSON_GLIOMAGENESIS_BY_PDGFB_UP, JOHANSSON_GLIOMAGENESIS_BY_PDGFB_UP
                                                            BIOCARTA_FBW7_PATHWAY, BIOCARTA_FBW7_PATHWAY
                                                            KEGG_P53_SIGNALING_PATHWAY, KEGG_P53_SIGNALING_PATHWAY
                                                            REACTOME TRANSCRIPTION OF E2F TARGETS UNDER NEGATIVE CONTROL BY DREAM COMPLEX, REACTOME TRANSCRIPTION OF E2F TARGETS UNDER NEGATIVE CONTROL BY DREAM COMPLEX
                                                            MONTERO_THYROID_CANCER_POOR_SURVIVAL_UP, MONTERO_THYROID_CANCER_POOR_SURVIVAL_UP
                                                           FURUKAWA_DUSP6_TARGETS_PCI35_DN, FURUKAWA_DUSP6_TARGETS_PCI35_DN
                                                           WP_HEMATOPOIETIC_STEM_CELL_GENE_REGULATION_BY_GABP_ALPHABETA_COMPLEX, WP_HEMATOPOIETIC_STEM_CELL_GENE_REGULATION_BY_GABP_ALPHABETA_COMPLEX
                                                           FOURNIER_ACINAR_DEVELOPMENT_LATE_DN, FOURNIER_ACINAR_DEVELOPMENT_LATE_DN
                                                           WANG_CISPLATIN_RESPONSE_AND_XPC_UP, WANG_CISPLATIN_RESPONSE_AND_XPC_UP
                                                           KYNG_DNA_DAMAGE_BY_4NQO_OR_UV, KYNG_DNA_DAMAGE_BY_4NQO_OR_UV
                                                           WEST_ADRENOCORTICAL_TUMOR_MARKERS_UP, WEST_ADRENOCORTICAL_TUMOR_MARKERS_UP
                                                           WP_REGULATION_OF_MICROTUBULE_CYTOSKELETON, WP_REGULATION_OF_MICROTUBULE_CYTOSKELETON
                                                           NAKAYAMA_SOFT_TISSUE_TUMORS_PCA2_UP, NAKAYAMA_SOFT_TISSUE_TUMORS_PCA2_UP
                                                           FINETTI_BREAST_CANCER_KINOME_RED, FINETTI_BREAST_CANCER_KINOME_RED
                                                           LIANG_SILENCED_BY_METHYLATION_DN, LIANG_SILENCED_BY_METHYLATION_DN
                                                           ABE_VEGFA_TARGETS, ABE_VEGFA_TARGETS
                                                           GENTLES_LEUKEMIC_STEM_CELL_DN, GENTLES_LEUKEMIC_STEM_CELL_DN
                                                           OLSSON_E2F3_TARGETS_DN, OLSSON_E2F3_TARGETS_DN
                                                           GAZIN_EPIGENETIC_SILENCING_BY_KRAS, GAZIN_EPIGENETIC_SILENCING_BY_KRAS
                                                           MEINHOLD OVARIAN CANCER LOW GRADE DN, MEINHOLD OVARIAN CANCER LOW GRADE DN
                                                           YU_BAP1_TARGETS, YU_BAP1_TARGETS
                                                           GAVIN_FOXP3_TARGETS_CLUSTER_P6, GAVIN_FOXP3_TARGETS_CLUSTER_P6
                                                           REACTOME_INHIBITION_OF_REPLICATION_INITIATION_OF_DAMAGED_DNA_BY_RB1_E2F1, REACTOME_INHIBITION_OF_REPLICATION_INITIATION_OF_DAMAGED_DNA_BY_RB1_E2F1
                                                           REACTOME_CHK1_CHK2_CDS1_MEDIATED_INACTIVATION_OF_CYCLIN_B_CDK1_COMPLEX, REACTOME_CHK1_CHK2_CDS1_MEDIATED_INACTIVATION_OF_CYCLIN_B_CDK1_COMPLEX
                                                           SHAFFER_IRF4_TARGETS_IN_ACTIVATED_DENDRITIC_CELL, SHAFFER_IRF4_TARGETS_IN_ACTIVATED_DENDRITIC_CELI
                                                           BIOCARTA_PLK3_PATHWAY, BIOCARTA_PLK3_PATHWAY
                                                           BURTON_ADIPOGENESIS_12, BURTON_ADIPOGENESIS_12
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REACTOME_DNA_REPLICATION_INITIATION, REACTOME_DNA_REPLICATION_INITIATION
REACTOME_SIGNALING_BY_TGFB_FAMILY_MEMBERS, REACTOME_SIGNALING_BY_TGFB_FAMILY_MEMBERS
DING_LUNG_CANCER_MUTATED_SIGNIFICANTLY, DING_LUNG_CANCER_MUTATED_SIGNIFICANTLY
KEGG_NON_HOMOLOGOUS_END_JOINING, KEGG_NON_HOMOLOGOUS_END_JOINING
BIOCARTA_RB_PATHWAY, BIOCARTA_RB_PATHWAY
REACTOME_MITOTIC_TELOPHASE_CYTOKINESIS, REACTOME_MITOTIC_TELOPHASE_CYTOKINESIS
PID_DNA_PK_PATHWAY, PID_DNA_PK_PATHWAY
REACTOME_POLO_LIKE_KINASE_MEDIATED_EVENTS, REACTOME_POLO_LIKE_KINASE_MEDIATED_EVENTS
REACTOME_BUTYRATE_RESPONSE_FACTOR_1_BRF1_BINDS_AND_DESTABILIZES_MRNA, REACTOME_BUTYRATE_RESPONSE_FACTOR_1_BRF1_BINDS_AND_DESTABILIZES_MRNA
REACTOME_TP53_REGULATES_TRANSCRIPTION_OF_CELL_CYCLE_GENES, REACTOME_TP53_REGULATES_TRANSCRIPTION_OF_CELL_CYCLE_GENES
LINDSTEDT_DENDRITIC_CELL_MATURATION_C, LINDSTEDT_DENDRITIC_CELL_MATURATION_C

RIEGE_DELTANP63_DIRECT_TARGETS_UP, RIEGE_DELTANP63_DIRECT_TARGETS_UP

CHIARETTI_T_ALL_RELAPSE_PROGNOSIS, CHIARETTI_T_ALL_RELAPSE_PROGNOSIS

KUMAMOTO_RESPONSE_TO_NUTLIN_3A_DN, KUMAMOTO_RESPONSE_TO_NUTLIN_3A_DN

HONRADO_BREAST_CANCER_BRCA1_VS_BRCA2, HONRADO_BREAST_CANCER_BRCA1_VS_BRCA2

IWANAGA_E2F1_TARGETS_INDUCED_BY_SERUM, IWANAGA_E2F1_TARGETS_INDUCED_BY_SERUM

KYNG_RESPONSE_TO_H2O2, KYNG_RESPONSE_TO_H2O2

HU_GENOTOXIC_DAMAGE_4HR, HU_GENOTOXIC_DAMAGE_4HR

ZHAN_MULTIPLE_MYELOMA_UP, ZHAN_MULTIPLE_MYELOMA_UP

BIOCARTA_G2_PATHWAY, BIOCARTA_G2_PATHWAY

CROMER_METASTASIS_UP, CROMER_METASTASIS_UP

YAGI_AML_SURVIVAL, YAGI_AML_SURVIVAL

BOHN_PRIMARY_IMMUNODEFICIENCY_SYNDROM_UP, BOHN_PRIMARY_IMMUNODEFICIENCY_SYNDROM_UP

MUELLER_COMMON_TARGETS_OF_AML_FUSIONS_UP, MUELLER_COMMON_TARGETS_OF_AML_FUSIONS_UP

REACTOME_ESTABLISHMENT_OF_SISTER_CHROMATID_COHESION, REACTOME_ESTABLISHMENT_OF_SISTER_CHROMATID_COHESION

REACTOME_KSRP_KHSRP_BINDS_AND_DESTABILIZES_MRNA, REACTOME_KSRP_KHSRP_BINDS_AND_DESTABILIZES_MRNA

WP_PATHWAYS_AFFECTED_IN_ADENOID_CYSTIC_CARCINOMA, WP_PATHWAYS_AFFECTED_IN_ADENOID_CYSTIC_CARCINOMA