

REACTOME\_HOMOLOGY\_DIRECTED\_REPAIR,REACTOME\_HOMOLOGY\_DIRECTED\_REPAIR  
GOBP\_REGULATION\_OF\_SIGNAL\_TRANSDUCTION\_BY\_P53\_CLASS\_MEDIATOR,GOBP\_REGULATION\_OF\_SIGNAL\_TRANSDUCTION\_BY\_P53\_CLASS\_MEDIATOR  
REACTOME\_SUMOYLATION,REACTOME\_SUMOYLATION  
WP\_DNA\_REPAIR\_PATHWAYS\_FULL\_NETWORK,WP\_DNA\_REPAIR\_PATHWAYS\_FULL\_NETWORK  
GSE41476\_WT\_VS\_TAK1\_KO\_ASTL\_ICM\_STIM\_BCELL\_24H\_DN,GSE41476\_WT\_VS\_TAK1\_KO\_ASTL\_ICM\_STIM\_BCELL\_24H\_DN  
REACTOME\_HATS\_ACETYLTATE\_HISTONES,REACTOME\_HATS\_ACETYLTATE\_HISTONES  
REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY,REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY  
GOBP\_RECOMBINATIONAL\_REPAIR,GOBP\_RECOMBINATIONAL\_REPAIR  
REACTOME\_HCMV\_LATE\_EVENTS,REACTOME\_HCMV\_LATE\_EVENTS  
REACTOME\_ESTROGEN\_DEPENDENT\_GENE\_EXPRESSION,REACTOME\_ESTROGEN\_DEPENDENT\_GENE\_EXPRESSION  
GOMF\_MODIFICATION\_DEPENDENT\_PROTEIN\_BINDING,GOMF\_MODIFICATION\_DEPENDENT\_PROTEIN\_BINDING  
REACTOME\_EPIGENETIC\_REGULATION\_OF\_GENE\_EXPRESSION,REACTOME\_EPIGENETIC\_REGULATION\_OF\_GENE\_EXPRESSION  
REACTOME\_HCMV\_INFECTION,REACTOME\_HCMV\_INFECTION  
GOBP\_CHROMATIN\_ORGANIZATION\_INVOLVED\_IN\_REGULATION\_OF\_TRANSCRIPTION,GOBP\_CHROMATIN\_ORGANIZATION\_INVOLVED\_IN\_REGULATION\_OF\_TRANSCRIPTION  
REACTOME\_GENE\_SILENCING\_BY\_RNA,REACTOME\_GENE\_SILENCING\_BY\_RNA  
GSE448\_CTRL\_VS\_ANTI\_VALPH42\_DP\_THYMOCYTE\_UP,GSE448\_CTRL\_VS\_ANTI\_VALPH42\_DP\_THYMOCYTE\_UP  
REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_SMALL\_RNAS,REACTOME\_TRANSCRIPTIONAL\_REGULATION\_BY\_SMALL\_RNAS  
REACTOME\_HDACs\_DEACETYLTATE\_HISTONES,REACTOME\_HDACs\_DEACETYLTATE\_HISTONES  
REACTOME\_PROCESSING\_OF\_DNA\_DOUBLE\_STRAND\_BREAK\_ENDS,REACTOME\_PROCESSING\_OF\_DNA\_DOUBLE\_STRAND\_BREAK\_ENDS  
REACTOME\_HCMV\_EARLY\_EVENTS,REACTOME\_HCMV\_EARLY\_EVENTS  
GSE12845\_IJD\_POS\_VS\_NAIVE\_TONSIL\_BCELL\_UP,GSE12845\_IJD\_POS\_BLOOD\_VS\_NAIVE\_TONSIL\_BCELL\_UP  
REACTOME\_TRANSCRIPTION\_COUPLED\_NUCLEOTIDE\_EXCISION\_REPAIR\_TC\_NER,REACTOME\_TRANSCRIPTION\_COUPLED\_NUCLEOTIDE\_EXCISION\_REPAIR\_TC\_NER  
GOBP\_TRANSCRIPTION\_COUPLED\_NUCLEOTIDE\_EXCISION\_REPAIR,GOBP\_TRANSCRIPTION\_COUPLED\_NUCLEOTIDE\_EXCISION\_REPAIR  
GOBP\_NON\_RECOMBINATIONAL\_REPAIR,GOBP\_NON\_RECOMBINATIONAL\_REPAIR  
REACTOME\_HDR\_THROUGH\_HOMOLOGOUS\_RECOMBINATION\_HRR,REACTOME\_HDR\_THROUGH\_HOMOLOGOUS\_RECOMBINATION\_HRR  
GOBP\_REGULATION\_OF\_GENE\_SILENCING,GOBP\_REGULATION\_OF\_GENE\_SILENCING  
WP\_INTEGRATED\_BREAST\_CANCER\_PATHWAY,WP\_INTEGRATED\_BREAST\_CANCER\_PATHWAY  
REACTOME\_NEGATIVE\_EPIGENETIC\_REGULATION\_OF\_RRNA\_EXPRESSION,REACTOME\_NEGATIVE\_EPIGENETIC\_REGULATION\_OF\_RRNA\_EXPRESSION  
GOBP\_RESPONSE\_TO\_IONIZING\_RADIATION,GOBP\_RESPONSE\_TO\_IONIZING\_RADIATION  
HP\_FINGER\_SYNDACTYLY,HP\_FINGER\_SYNDACTYLY  
HP\_ASTIGMATISM,HP\_ASTIGMATISM  
REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY\_THROUGH\_PHOSPHORYLATION,REACTOME\_REGULATION\_OF\_TP53\_ACTIVITY\_THROUGH\_PHOSPHORYLATION  
HP\_APLASIA\_HYPOPLASIA\_OF\_THE\_SKIN,HP\_APLASIA\_HYPOPLASIA\_OF\_THE\_SKIN  
REACTOME\_OXIDATIVE\_STRESS\_INDUCED\_SENESCENCE,REACTOME\_OXIDATIVE\_STRESS\_INDUCED\_SENESCENCE  
GOCC\_SITE\_OF\_DNA\_DAMAGE\_GCCS\_SITE\_OF\_DNA\_DAMAGE  
REACTOME\_BASE\_EXCISION\_REPAIR,REACTOME\_BASE\_EXCISION\_REPAIR  
REACTOME\_RNA\_POLYMERASE\_I\_TRANSCRIPTION,REACTOME\_RNA\_POLYMERASE\_I\_TRANSCRIPTION  
GOBP\_REGULATION\_OF\_CHROMATIN\_ORGANIZATION,GOBP\_REGULATION\_OF\_CHROMATIN\_ORGANIZATION  
GOMF\_DAMAGED\_DNA\_BINDING,GOMF\_DAMAGED\_DNA\_BINDING  
GSE2103\_3H\_VS\_24H\_POLYIC\_STIM\_IC\_DN,GSE2103\_3H\_VS\_24H\_POLYIC\_STIM\_IC\_DN  
REACTOME\_R\_WICH\_COMPLEX\_POSITIVELY\_REGULATES\_RRNA\_EXPRESSION,REACTOME\_R\_WICH\_COMPLEX\_POSITIVELY\_REGULATES\_RRNA\_EXPRESSION  
HP\_ABNORMALITY\_OF\_BONE\_MARROW\_CELL\_MORPHOLOGY,HP\_ABNORMALITY\_OF\_BONE\_MARROW\_CELL\_MORPHOLOGY  
REACTOME\_POSITIVE\_EPIGENETIC\_REGULATION\_OF\_RRNA\_EXPRESSION,REACTOME\_POSITIVE\_EPIGENETIC\_REGULATION\_OF\_RRNA\_EXPRESSION  
REACTOME\_G2\_M\_DNA\_DAMAGE\_CHECKPOINT,REACTOME\_G2\_M\_DNA\_DAMAGE\_CHECKPOINT  
REACTOME\_FORMATION\_OF\_THE\_BETA\_CATENIN\_TCF\_TRANSACTIVATING\_COMPLEX,REACTOME\_FORMATION\_OF\_THE\_BETA\_CATENIN\_TCF\_TRANSACTIVATING\_COMPLEX  
REACTOME\_MEIOTIC\_RECOMBINATION,REACTOME\_MEIOTIC\_RECOMBINATION  
REACTOME\_RNA\_POLYMERASE\_I\_PROMOTER\_ESCAPE,REACTOME\_RNA\_POLYMERASE\_I\_PROMOTER\_ESCAPE  
HP\_TELANGIECTASIA,HP\_TELANGIECTASIA  
EGFR\_UP\_V1\_DN,EGFR\_UP\_V1\_DN  
HP\_SPINAL\_DYSRAPHISM,HP\_SPINAL\_DYSRAPHISM  
GOBP\_RESPONSE\_TO\_UV,GOBP\_RESPONSE\_TO\_UV  
REACTOME\_DISEASES\_OF\_PROGRAMMED\_CELL\_DEATH,REACTOME\_DISEASES\_OF\_PROGRAMMED\_CELL\_DEATH  
HP\_ABNORMAL\_NEURAL\_TUBE\_MORPHOLOGY,HP\_ABNORMAL\_NEURAL\_TUBE\_MORPHOLOGY  
GOMF\_EXONUCLEASE\_ACTIVITY,GOMF\_EXONUCLEASE\_ACTIVITY  
REACTOME\_SIRT1\_NEGATIVELY\_REGULATES\_RRNA\_EXPRESSION,REACTOME\_SIRT1\_NEGATIVELY\_REGULATES\_RRNA\_EXPRESSION  
HP\_HYPOPIGMENTATION\_OF\_THE\_SKIN,HP\_HYPOPIGMENTATION\_OF\_THE\_SKIN  
REACTOME\_PROTEIN\_UBIQUITINATION,REACTOME\_PROTEIN\_UBIQUITINATION  
HP\_IRREGULAR\_HYPERPIGMENTATION,HP\_IRREGULAR\_HYPERPIGMENTATION  
REACTOME\_ACTIVATION\_OF\_ANTERIOR\_HOX\_GENES\_IN\_HINDRAIN\_DEVELOPMENT\_DURING\_EARLY\_EMBRYOGENESIS,REACTOME\_ACTIVATION\_OF\_ANTERIOR\_HOX\_GENES\_IN\_HINDRAIN\_DEVELOPMENT\_DURING\_EARLY\_EMBRYOGENESIS  
KRCTCNNNNMANAGC\_UNKNOWN,KRCTCNNNNMANAGC\_UNKNOWN  
GSE12845\_IJD\_POS\_VS\_NEG\_BLOOD\_BCELL\_UP,GSE12845\_IJD\_POS\_VS\_NEG\_BLOOD\_BCELL\_UP  
REACTOME\_DNA\_METHYLATION,REACTOME\_DNA\_METHYLATION  
REACTOME\_ERCC6\_CSB\_AND\_EHMT2\_G9A\_POSITIVELY\_REGULATE\_RRNA\_EXPRESSION,REACTOME\_ERCC6\_CSB\_AND\_EHMT2\_G9A\_POSITIVELY\_REGULATE\_RRNA\_EXPRESSION  
HP\_DOLICHOCERPHALY,HP\_DOLICHOCERPHALY  
REACTOME\_NONHOMOLOGOUS\_END\_JOINING\_NHEJ,REACTOME\_NONHOMOLOGOUS\_END\_JOINING\_NHEJ  
HP\_DYSMETRIA,HP\_DYSMETRIA  
HP\_SOMATIC\_MUTATION,HP\_SOMATIC\_MUTATION  
REACTOME\_RUNX1\_REGULATES\_GENES\_INVOLVED\_IN\_MEGAKARYOCYTE\_DIFFERENTIATION\_AND\_PLATELET\_FUNCTION,REACTOME\_RUNX1\_REGULATES\_GENES\_INVOLVED\_IN\_MEGAKARYOCYTE\_DIFFERENTIATION\_AND\_PLATELET\_FUNCTION  
REACTOME\_ACTIVATED\_PKN1\_STIMULATES\_TRANSCRIPTION\_OF\_AR\_ANDROGEN\_RECEPTOR\_REGULATED\_GENES\_KLK2\_AND\_KLK3,REACTOME\_ACTIVATED\_PKN1\_STIMULATES\_TRANSCRIPTION\_OF\_AR\_ANDROGEN\_RECEPTOR\_REGULATED\_GENES\_KLK2\_AND\_KLK3  
GOMF\_PROTEIN\_N\_TERMINUS\_BINDING,GOMF\_PROTEIN\_N\_TERMINUS\_BINDING  
REACTOME\_RMTS\_METHYLATE\_HISTONE\_ARGININES,REACTOME\_RMTS\_METHYLATE\_HISTONE\_ARGININES  
HP\_ABNORMALITY\_OF\_THE\_UVULA,HP\_ABNORMALITY\_OF\_THE\_UVULA  
TTNNANAGCYR\_UNKNOWN,TTNNANAGCYR\_UNKNOWN  
GOCC\_PML\_BODY,GOCC\_PML\_BODY  
GOBP\_CELLULAR\_RESPONSE\_TO\_RADIATION,GOBP\_CELLULAR\_RESPONSE\_TO\_RADIATION  
GOBP\_REGULATION\_OF\_HISTONE\_MODIFICATION,GOBP\_REGULATION\_OF\_HISTONE\_MODIFICATION  
REACTOME\_AMYLOID\_FIBER\_FORMATION,REACTOME\_AMYLOID\_FIBER\_FORMATION  
HP\_ABNORMAL\_AORTIC\_VALVE\_MORPHOLOGY,HP\_ABNORMAL\_AORTIC\_VALVE\_MORPHOLOGY  
HP\_BLEPHAROPHIMOSIS,HP\_BLEPHAROPHIMOSIS  
HP\_NEOPLASM\_OF\_THE\_PANCREAS,HP\_NEOPLASM\_OF\_THE\_PANCREAS  
SMARCA1\_TARGET\_GENES,SMARCA1\_TARGET\_GENES  
PID\_FANCONI\_PATHWAY,PID\_FANCONI\_PATHWAY  
KOKKINAKS\_METHIONINE\_DEPRIVATION\_48HR\_UP,KOKKINAKS\_METHIONINE\_DEPRIVATION\_48HR\_UP  
GOBP\_DNA\_SYNTHESIS\_INVOLVED\_IN\_DNA\_REPAIR,GOBP\_DNA\_SYNTHESIS\_INVOLVED\_IN\_DNA\_REPAIR  
HP\_PANCYTOPENIA,HP\_PANCYTOPENIA  
REACTOME\_RHO\_GTPASES\_ACTIVATE\_PKNS,REACTOME\_RHO\_GTPASES\_ACTIVATE\_PKNS  
GOBP\_REGULATION\_OF\_DNA\_RECOMBINATION,GOBP\_REGULATION\_OF\_DNA\_RECOMBINATION  
GOBP\_HETEROCHROMATIN\_ORGANIZATION,GOBP\_HETEROCHROMATIN\_ORGANIZATION  
HP\_ABNORMALITY\_OF\_THE\_ANGUS,HP\_ABNORMALITY\_OF\_THE\_ANGUS  
REACTOME\_INHIBITION\_OF\_DNA\_RECOMBINATION\_AT\_TELOMERE,REACTOME\_INHIBITION\_OF\_DNA\_RECOMBINATION\_AT\_TELOMERE  
HP\_NEOPLASM\_OF\_THE\_SKIN,HP\_NEOPLASM\_OF\_THE\_SKIN  
WP\_ANDROGEN\_RECEPTOR\_SIGNALING\_PATHWAY,WP\_ANDROGEN\_RECEPTOR\_SIGNALING\_PATHWAY  
REACTOME\_DNA\_DOUBLE\_STRAND\_BREAK\_RESPONSE,REACTOME\_DNA\_DOUBLE\_STRAND\_BREAK\_RESPONSE  
REACTOME\_E3\_UBQUITIN\_LIGASES\_UBIQUITINATE\_TARGET\_PROTEINS,REACTOME\_E3\_UBQUITIN\_LIGASES\_UBIQUITINATE\_TARGET\_PROTEINS  
HP\_HYPOPIGMENTED\_SKIN\_PATCHES,HP\_HYPOPIGMENTED\_SKIN\_PATCHES  
HP\_PROMINENT\_NOSE,HP\_PROMINENT\_NOSE  
GOMF\_EXONUCLEASE\_ACTIVITY\_ACTIVE\_WITH\_EITHER\_RIBO\_OR\_DEOXYRIBONUCLEIC\_ACIDS\_AND\_PRODUCING\_5\_PHOSPHOMONOESTERS,GOMF\_EXONUCLEASE\_ACTIVITY\_ACTIVE\_WITH\_EITHER\_RIBO\_OR\_DEOXYRIBONUCLEIC\_ACIDS\_AND\_PRODUCING\_5\_PHOSPHOMONOESTERS  
HP\_SHORT\_LONG\_BONE,HP\_SHORT\_LONG\_BONE  
KEGG\_SYSTEMIC\_LUPUS\_ERYTHEMATOSUS,KEGG\_SYSTEMIC\_LUPUS\_ERYTHEMATOSUS  
RBM15\_TARGET\_GENES,RBM15\_TARGET\_GENES  
GOCC\_DNA\_REPAIR\_COMPLEX\_GOCC\_DNA\_REPAIR\_COMPLEX  
HP\_ABNORMALITY\_OF\_ODONTOID\_TISSUE,HP\_ABNORMALITY\_OF\_ODONTOID\_TISSUE  
GOBP\_POSITIVE\_REGULATION\_OF\_CHROMATIN\_ORGANIZATION,GOBP\_POSITIVE\_REGULATION\_OF\_CHROMATIN\_ORGANIZATION  
REACTOME\_PKMTS\_METHYLATE\_HISTONE\_LYSINES,REACTOME\_PKMTS\_METHYLATE\_HISTONE\_LYSINES  
REACTOME\_BASE\_EXCISION\_REPAIR\_AP\_SITE\_FORMATION,REACTOME\_BASE\_EXCISION\_REPAIR\_AP\_SITE\_FORMATION  
HP\_ABNORMAL\_ESOPHAGUS\_MORPHOLOGY,HP\_ABNORMAL\_ESOPHAGUS\_MORPHOLOGY  
HP\_TETRALOXY\_OF\_FALLOT,HP\_TETRALOXY\_OF\_FALLOT  
HP\_ABNORMAL\_URETER\_MORPHOLOGY,HP\_ABNORMAL\_URETER\_MORPHOLOGY  
GOBP\_TRANSLESION\_SYNTHESIS,GOBP\_TRANSLESION\_SYNTHESIS  
GOBP\_POSITIVE\_REGULATION\_OF\_RESPONSE\_TO\_DNA\_DAMAGE\_STIMULUS,GOBP\_POSITIVE\_REGULATION\_OF\_RESPONSE\_TO\_DNA\_DAMAGE\_STIMULUS  
WP\_BREAST\_CANCER\_PATHWAY,WP\_BREAST\_CANCER\_PATHWAY  
HP\_AGANGLIONIC\_MEGACOLON,HP\_AGANGLIONIC\_MEGACOLON  
JACKSON\_DMNT1\_TARGETS\_UP,JACKSON\_DMNT1\_TARGETS\_UP  
REACTOME\_FANCONI\_ANEMIA\_PATHWAY,REACTOME\_FANCONI\_ANEMIA\_PATHWAY  
HP\_SMALL\_FACE,HP\_SMALL\_FACE  
HP\_MELANOMA,HP\_MELANOMA  
PID\_AR\_PATHWAY,PID\_AR\_PATHWAY  
HP\_FACIAL\_ASYMMETRY,HP\_FACIAL\_ASYMMETRY  
REACTOME\_RESOLUTION\_OF\_D\_LOOP\_STRUCTURES,REACTOME\_RESOLUTION\_OF\_D\_LOOP\_STRUCTURES  
HP\_ANAL\_ATRESIA,HP\_ANAL\_ATRESIA  
HP\_RECURRENT\_URINARY\_TRACT\_INFECTIONS,HP\_RECURRENT\_URINARY\_TRACT\_INFECTIONS  
HP\_EXTERNAL\_EAR\_MALFORMATION,HP\_EXTERNAL\_EAR\_MALFORMATION  
GSE13411\_SWITCHED\_MEMORY\_BCELL\_VS\_PLASMA\_CELL\_DN,GSE13411\_SWITCHED\_MEMORY\_BCELL\_VS\_PLASMA\_CELL\_DN  
GOMF\_MANGANESE\_ION\_BINDING,GOMF\_MANGANESE\_ION\_BINDING  
GOBP\_DNA\_REPLICATION\_DEPENDENT\_NUCLEOSOME\_ORGANIZATION,GOBP\_DNA\_REPLICATION\_DEPENDENT\_NUCLEOSOME\_ORGANIZATION  
REACTOME\_P75\_NTR\_RECEPTOR\_MEDIATED\_SIGNALING,REACTOME\_P75\_NTR\_RECEPTOR\_MEDIATED\_SIGNALING  
WP\_HISTONE\_MODIFICATIONS,WP\_HISTONE\_MODIFICATIONS  
GOBP\_SOMATIC\_DIVERSIFICATION\_OF\_IMMUNE\_RECEPTORS,GOBP\_SOMATIC\_DIVERSIFICATION\_OF\_IMMUNE\_RECEPTORS  
GOBP\_MISMATCH\_REPAIR,GOBP\_MISMATCH\_REPAIR  
CENPT\_TARGET\_GENES,CENPT\_TARGET\_GENES  
HP\_ABNORMALITY\_OF\_CHROMOSOME\_STABILITY,HP\_ABNORMALITY\_OF\_CHROMOSOME\_STABILITY  
WP\_22Q12\_COPY\_NUMBER\_VARIATION\_SYNDROME,WP\_22Q12\_COPY\_NUMBER\_VARIATION\_SYNDROME  
REACTOME\_NOTCH1\_INTRACELLULAR\_DOMAIN\_REGULATES\_TRANSCRIPTION,REACTOME\_NOTCH1\_INTRACELLULAR\_DOMAIN\_REGULATES\_TRANSCRIPTION  
GSE24574\_BCL6\_LOW\_THF\_VS\_TCONV\_CD4\_TCELL\_UP,GSE24574\_BCL6\_LOW\_THF\_VS\_TCONV\_CD4\_TCELL\_UP  
WP\_JOUBERT\_SYNDROME,WP\_JOUBERT\_SYNDROME  
GOBP\_BASE\_EXCISION\_REPAIR,GOBP\_BASE\_EXCISION\_REPAIR  
HP\_APLASIA\_HYPOPLASIA\_INVOLVING\_FOREARM\_BONES,HP\_APLASIA\_HYPOPLASIA\_INVOLVING\_FOREARM\_BONES  
REACTOME\_HDMs\_DEMETHYLATE\_HISTONES,REACTOME\_HDMs\_DEMETHYLATE\_HISTONES  
HP\_APLASTIC\_HYPOPLASTIC\_TOENAIL,HP\_APLASTIC\_HYPOPLASTIC\_TOENAIL  
REACTOME\_SIGNALING\_BY\_NOTCH1\_PEST\_DOMAIN\_MUTANTS\_IN\_CANCER,REACTOME\_SIGNALING\_BY\_NOTCH1\_PEST\_DOMAIN\_MUTANTS\_IN\_CANCER  
GOBP\_TELOMERE\_CAPPING,GOBP\_TELOMERE\_CAPPING  
HP\_DERMAL\_ATROPHY,HP\_DERMAL\_ATROPHY  
HP\_ABNORMALITY\_OF\_THE\_PHALANGES\_OF\_THE\_TOES,HP\_ABNORMALITY\_OF\_THE\_PHALANGES\_OF\_THE\_TOES  
GOBP\_RDNA\_HETEROCHROMATIN\_ASSEMBLY,GOBP\_RDNA\_HETEROCHROMATIN\_ASSEMBLY  
REACTOME\_METALLOPROTEASE\_DUBS,REACTOME\_METALLOPROTEASE\_DUBS  
REACTOME\_REGULATED\_NECROSIS,REACTOME\_REGULATED\_NECROSIS  
HP\_CONADAL\_NEOPLASM,HP\_CONADAL\_NEOPLASM  
HP\_ARTERIOVENOUS\_MALFORMATION,HP\_ARTERIOVENOUS\_MALFORMATION  
GOBP\_PROTEIN\_K63\_LINKED\_UBIQUITINATION,GOBP\_PROTEIN\_K63\_LINKED\_UBIQUITINATION  
HP\_RECURRENT\_VIRAL\_INFECTIONS,HP\_RECURRENT\_VIRAL\_INFECTIONS  
HP\_ECTOPIC\_KIDNEY,HP\_ECTOPIC\_KIDNEY  
REACTOME\_CELL\_DEATH\_SIGNALLING\_VIA\_NRA2\_NRF1\_AND\_NAD2,REACTOME\_CELL\_DEATH\_SIGNALLING\_VIA\_NRA2\_NRF1\_AND\_NAD2  
GOMF\_DEOXYRIBONUCLEASE\_ACTIVITY,GOMF\_DEOXYRIBONUCLEASE\_ACTIVITY  
GOBP\_REGULATION\_OF\_CELLULAR\_RESPONSE\_TO\_TRANSFORMING\_GROWTH\_FACTOR\_BETA\_STIMULUS,GOBP\_REGULATION\_OF\_CELLULAR\_RESPONSE\_TO\_TRANSFORMING\_GROWTH\_FACTOR\_BETA\_STIMULUS  
RAD4\_VA\_RESPONSE\_TO\_IPNA1\_UP,RAD4\_VA\_RESPONSE\_TO\_IPNA1\_UP  
MED25\_TARGET\_GENES,MED25\_TARGET\_GENES  
GOBP\_POSITIVE\_REGULATION\_OF\_HISTONE\_METHYLATION,GOBP\_POSITIVE\_REGULATION\_OF\_HISTONE\_METHYLATION  
HP\_MORPHOLOGICAL\_ABNORMALITY\_OF\_THE\_PYRAMIDAL\_TRACT,HP\_MORPHOLOGICAL\_ABNORMALITY\_OF\_THE\_PYRAMIDAL\_TRACT  
GOBP\_NEGATIVE\_REGULATION\_OF\_TRANSMEMBRANE\_RECEPTOR\_PROTEIN\_SERINE\_THREONINE\_KINASE\_SIGNALING\_PATHWAY,GOBP\_NEGATIVE\_REGULATION\_OF\_TRANSMEMBRANE\_RECEPTOR\_PROTEIN\_SERINE\_THREONINE\_KINASE\_SIGNALING\_PATHWAY  
REACTOME\_INTERLEUKIN\_3\_INTERLEUKIN\_5\_AND\_GM-CSF\_SIGNALING,REACTOME\_INTERLEUKIN\_3\_INTERLEUKIN\_5\_AND\_GM-CSF\_SIGNALING  
HP\_ABNORMAL\_CIRCULATING\_ICG\_LEVEL,HP\_ABNORMAL\_CIRCULATING\_ICG\_LEVEL  
WP\_GENES\_INVOLVED\_IN\_MALE\_INFERTILITY,WP\_GENES\_INVOLVED\_IN\_MALE\_INFERTILITY  
HP\_ABNORMAL\_T\_CELL\_SUBSET\_DISTRIBUTION,HP\_ABNORMAL\_T\_CELL\_SUBSET\_DISTRIBUTION  
HP\_HYPOPLASIA\_OF\_DENTAL\_ENAMEL,HP\_HYPOPLASIA\_OF\_DENTAL\_ENAMEL  
GOBP\_REGULATION\_OF\_PROTEIN\_AUTOPHOSPHORYLATION,GOBP\_REGULATION\_OF\_PROTEIN\_AUTOPHOSPHORYLATION  
GOBP\_NEGATIVE\_REGULATION\_OF\_TRANSFORMING\_GROWTH\_FACTOR\_BETA\_RECEPTOR\_SIGNALING\_PATHWAY,GOBP\_NEGATIVE\_REGULATION\_OF\_TRANSFORMING\_GROWTH\_FACTOR\_BETA\_RECEPTOR\_SIGNALING\_PATHWAY  
REACTOME\_RUBBING\_AND\_MATURATION\_OF\_HYFIRION,REACTOME\_RUBBING\_AND\_MATURATION\_OF\_HYFIRION  
GOBP\_REGULATION\_OF\_DOUBLE\_STRAND\_BREAK\_REPAIR\_VIA\_NONHOMOLOGOUS\_END\_JOINING,GOBP\_REGULATION\_OF\_DOUBLE\_STRAND\_BREAK\_REPAIR\_VIA\_NONHOMOLOGOUS\_END\_JOINING  
HP\_OVARIAN\_NEOPLASM,HP\_OVARIAN\_NEOPLASM  
GOBP\_POSITIVE\_REGULATION\_OF\_DOUBLE\_STRAND\_BREAK\_REPAIR,GOBP\_POSITIVE\_REGULATION\_OF\_DOUBLE\_STRAND\_BREAK\_REPAIR  
REACTOME\_OVARIAN\_TUMOR\_DOMAIN\_PROTEASES,REACTOME\_OVARIAN\_TUMOR\_DOMAIN\_PROTEASES  
HP\_ABNORMAL\_CIRCULATING\_ICG\_LEVEL,HP\_ABNORMAL\_CIRCULATING\_ICG\_LEVEL  
REACTOME\_SIGNALING\_BY\_FGFR3,REACTOME\_SIGNALING\_BY\_FGFR3  
TERT\_TARGET\_GENES,TERT\_TARGET\_GENES  
HSF4\_TARGET\_GENES,HSF4\_TARGET\_GENES  
HP\_PULMONARY\_FIBROSIS,HP\_PULMONARY\_FIBROSIS  
HP\_T\_LYMPOCYTOPENIA,HP\_T\_LYMPOCYTOPENIA  
GOBP\_MYD88\_INDEPENDENT\_TOLL\_LIKE\_RECEPTOR\_SIGNALING\_PATHWAY,GOBP\_MYD88\_INDEPENDENT\_TOLL\_LIKE\_RECEPTOR\_SIGNALING\_PATHWAY  
HP\_HYPOGONADOTROPIC\_HYPOGONADISM,HP\_HYPOGONADOTROPIC\_HYPOGONADISM  
REACTOME\_SIGNALING\_BY\_FGFR1,REACTOME\_SIGNALING\_BY\_FGFR1  
HP\_MORPHOLOGICAL\_ABNORMALITY\_OF\_THE\_CORTICOSPINAL\_TRACT,HP\_MORPHOLOGICAL\_ABNORMALITY\_OF\_THE\_CORTICOSPINAL\_TRACT  
HP\_TISSUE\_ISCHEMIA,HP\_TISSUE\_ISCHEMIA  
HP\_CEREBELLAR\_VERMIS\_ATROPHY,HP\_CEREBELLAR\_VERMIS\_ATROPHY  
GOBP\_REGULATION\_OF\_DNA\_DAMAGE\_RESPONSE\_SIGNAL\_TRANSDUCTION\_BY\_P53\_CLASS\_MEDIATOR,GOBP\_REGULATION\_OF\_DNA\_DAMAGE\_RESPONSE\_SIGNAL\_TRANSDUCTION\_BY\_P53\_CLASS\_MEDIATOR  
HP\_APLASIA\_HYPOPLASIA\_OF\_THE\_THYMUS,HP\_APLASIA\_HYPOPLASIA\_OF\_THE\_THYMUS  
HP\_ABNORMAL\_B\_CELL\_MORPHOLOGY,HP\_ABNORMAL\_B\_CELL\_MORPHOLOGY  
REACTOME\_SIGNALING\_BY\_FGFR4,REACTOME\_SIGNALING\_BY\_FGFR4  
HP\_HYPOPLASTIC\_TOENAILS,HP\_HYPOPLASTIC\_TOENAILS  
REACTOME\_SIGNALING\_BY\_NOTCH3,REACTOME\_SIGNALING\_BY\_NOTCH3  
LIANG\_SILENCED\_BY\_METHYLATION\_UP,LIANG\_SILENCED\_BY\_METHYLATION\_UP  
GOBP\_MALE\_MEIOTIC\_NUCLEAR\_DIVISION,GOBP\_MALE\_MEIOTIC\_NUCLEAR\_DIVISION  
KEGG\_NON\_HOMOLOGOUS\_END\_JOINING,KEGG\_NON\_HOMOLOGOUS\_END\_JOINING  
OVSYANNIKOVA\_PBMc\_FLUARIX\_AGE\_50\_74YO\_COMMON\_WITH\_BOTH\_HAI\_AND\_VNA\_28DY\_VS\_3DY\_USED\_IN\_HAI\_AND\_VNA\_RESPONSE\_MODELS\_DN,OVSYANNIKOVA\_PBMc\_FLUARIX\_AGE\_50\_74YO\_COMMON\_WITH\_BOTH\_HAI\_AND\_VNA\_28DY\_VS\_3DY\_USED\_IN\_HAI\_AND\_VNA\_RESPONSE\_MODELS\_DN  
HP\_MYOCARDIAL\_INFARCTION,HP\_MYOCARDIAL\_INFARCTION  
GOBP\_CELLULAR\_RESPONSE\_TO\_ALCOHOL,GOBP\_CELLULAR\_RESPONSE\_TO\_ALCOHOL  
GOBP\_MULTIFACTORIAL\_INHERITANCE,GOBP\_MULTIFACTORIAL\_INHERITANCE  
REACTOME\_STIMULI\_SENSING\_CHANNELS,REACTOME\_STIMULI\_SENSING\_CHANNELS  
GOBP\_POSITIVE\_REGULATION\_OF\_DOUBLE\_STRAND\_BREAK\_REPAIR\_VIA\_NONHOMOLOGOUS\_END\_JOINING,GOBP\_POSITIVE\_REGULATION\_OF\_DOUBLE\_STRAND\_BREAK\_REPAIR\_VIA\_NONHOMOLOGOUS\_END\_JOINING  
REACTOME\_SIGNALING\_BY\_ERBB4,REACTOME\_SIGNALING\_BY\_ERBB4  
HP\_ADENOMATOUS\_COLONIC\_POLYPOSIS,HP\_ADENOMATOUS\_COLONIC\_POLYPOSIS  
YTTCNNNGGAMR\_UNKNOWN,YTTCNNNGGAMR\_UNKNOWN  
GOBP\_MITOCHONDRIAL\_DEPOLARIZATION,GOBP\_MITOCHONDRIAL\_DEPOLARIZATION  
GOBP\_HISTONE\_H3\_K9\_METHYLATION,GOBP\_HISTONE\_H3\_K9\_METHYLATION  
WP\_NONHOMOLOGOUS\_END\_JOINING,WP\_NONHOMOLOGOUS\_END\_JOINING  
GOCC\_NONHOMOLOGOUS\_END\_JOINING\_COMPLEX,GOCC\_NONHOMOLOGOUS\_END\_JOINING\_COMPLEX  
GOBP\_SOMITE\_DEVELOPMENT,GOBP\_SOMITE\_DEVELOPMENT  
DING\_LUNG\_CANCER\_MUTATED\_SIGNIFICANTLY,DING\_LUNG\_CANCER\_MUTATED\_SIGNIFICANTLY  
REACTOME\_TP53\_REGULATES\_TRANSCRIPTION\_OF\_CASPASE\_ACTIVATORS\_AND\_CASPASES,REACTOME\_TP53\_REGULATES\_TRANSCRIPTION\_OF\_CASPASE\_ACTIVATORS\_AND\_CASPASES  
HP\_CHRONIC\_FATIGUE,HP\_CHRONIC\_FATIGUE  
GOBP\_CELLULAR\_RESPONSE\_TO\_X\_RAY,GOBP\_CELLULAR\_RESPONSE\_TO\_X\_RAY  
GOBP\_DEFENSE\_RESPONSE\_TO\_GRAM\_POSITIVE\_BACTERIUM,GOBP\_DEFENSE\_RESPONSE\_TO\_GRAM\_POSITIVE\_BACTERIUM  
HP\_RECURRENT\_GASTROENTERITIS,HP\_RECURRENT\_GASTROENTERITIS  
RICKMAN\_HEAD\_AND\_NECK\_CANCER\_C,RICKMAN\_HEAD\_AND\_NECK\_CANCER\_C  
GOBP\_HISTONE\_H3\_K9\_ACETYLTATION,GOBP\_HISTONE\_H3\_K9\_ACETYLTATION  
GOMF\_G\_QUADRUPLIX\_DNA\_BINDING,GOMF\_G\_QUADRUPLIX\_DNA\_BINDING  
GOBP\_SINGLE\_STRAND\_BREAK\_REPAIR,GOBP\_SINGLE\_STRAND\_BREAK\_REPAIR  
GOBP\_POSITIVE\_REGULATION\_OF\_DNA\_DAMAGE\_RESPONSE\_SIGNAL\_TRANSDUCTION\_BY\_P53\_CLASS\_MEDIATOR,GOBP\_POSITIVE\_REGULATION\_OF\_DNA\_DAMAGE\_RESPONSE\_SIGNAL\_TRANSDUCTION\_BY\_P53\_CLASS\_MEDIATOR  
GOBP\_PROGRAMMED\_CELL\_DEATH\_INVOLVED\_IN\_CELL\_DEVELOPMENT,GOBP\_PROGRAMMED\_CELL\_DEATH\_INVOLVED\_IN\_CELL\_DEVELOPMENT  
GOBP\_TELOMERIC\_LOOP\_DISASSEMBLY,GOBP\_TELOMERIC\_LOOP\_DISASSEMBLY  
GOBP\_NEGATIVE\_REGULATION\_OF\_MEGAKARYOCYTE\_DIFFERENTIATION,GOBP\_NEGATIVE\_REGULATION\_OF\_MEGAKARYOCYTE\_DIFFERENTIATION  
GOMF\_1\_PHOSPHATIDYLINOSITOL\_3\_KINASE\_ACTIVITY\_GOMF\_1\_PHOSPHATIDYLINOSITOL\_3\_KINASE\_ACTIVITY  
GOBP\_INNATE\_IMMUNE\_RESPONSE\_IN\_MUCOSA,GOBP\_INNATE\_IMMUNE\_RESPONSE\_IN\_MUCOSA  
HP\_NARROW\_NOSE,HP\_NARROW\_NOSE  
WP\_NANOPARTICLE\_TRIGGERED\_REGULATED\_NECROSIS,WP\_NANOPARTICLE\_TRIGGERED\_REGULATED\_NECROSIS  
chr9q11,chr9q11  
DAVIES\_MULTIPLE\_MYELOMA\_VS\_MGUS\_UP,DAVIES\_MULTIPLE\_MYELOMA\_VS\_MGUS\_UP  
GOMF\_CROSSOVER\_JUNCTION\_ENDODEOXYRIBONUCLEASE\_ACTIVITY,GOMF\_CROSSOVER\_JUNCTION\_ENDODEOXYRIBONUCLEASE\_ACTIVITY  
HP\_NASAL\_REGURIGATION,HP\_NASAL\_REGURIGATION  
MIR3678\_5P,MIR3678\_5P  
GOBP\_ORGAN\_OR\_TISSUE\_SPECIFIC\_IMMUNE\_RESPONSE,GOBP\_ORGAN\_OR\_TISSUE\_SPECIFIC\_IMMUNE\_RESPONSE  
MODULE\_70,MODULE\_70  
HP\_ADRENOCORTICAL\_CARCINOMA,HP\_ADRENOCORTICAL\_CARCINOMA  
GOBP\_NEGATIVE\_REGULATION\_OF\_CELLULAR\_SENESCENCE,GOBP\_NEGATIVE\_REGULATION\_OF\_CELLULAR\_SENESCENCE  
HP\_COCHLEAR\_MALFORMATION,HP\_COCHLEAR\_MALFORMATION  
GOBP\_SOMITOGENESIS,GOBP\_SOMITOGENESIS  
GOBP\_POSITIVE\_REGULATION\_OF\_MORPHOGENESIS\_OF\_AN\_EPITHELIUM,GOBP\_POSITIVE\_REGULATION\_OF\_MORPHOGENESIS\_OF\_AN\_EPITHELIUM  
HP\_APLASIA\_HYPOPLASIA\_OF\_THE\_INNER\_EAR,HP\_APLASIA\_HYPOPLASIA\_OF\_THE\_INNER\_EAR  
DING\_LUNG\_CANCER\_BY\_MUTATION\_RATE,DING\_LUNG\_CANCER\_BY\_MUTATION\_RATE  
HP\_CRACKLES,HP\_CRACKLES  
HP\_ABSENT\_PHALANGEAL\_CREASE,HP\_ABSENT\_PHALANGEAL\_CREASE  
UROSEVIC\_RESPONSE\_TO\_IMQUIMOD,UROSEVIC\_RESPONSE\_TO\_IMQUIMOD  
WEBER\_METHYLATED\_ICP\_IN\_SPERM\_DN,WEBER\_METHYLATED\_ICP\_IN\_SPERM\_DN  
DE\_YV1\_TARGETS\_UP,DE\_YV1\_TARGETS\_UP  
GENTILE\_UV\_HIGH\_DOSE\_UP,GENTILE\_UV\_HIGH\_DOSE\_UP  
GOBP\_CELLULAR\_RESPONSE\_TO\_ALKALOID,GOBP\_CELLULAR\_RESPONSE\_TO\_ALKALOID  
OHM\_EMBRYONIC\_CARCINOMA\_UP,OHM\_EMBRYONIC\_CARCINOMA\_UP  
HP\_OBSTRUCTIVE\_AZOOSPERMIA,HP\_OBSTRUCTIVE\_AZOOSPERMIA  
HP\_ABNORMAL\_FINGER\_FLEXION\_CREASES,HP\_ABNORMAL\_FINGER\_FLEXION\_CREASES  
GOBP\_POST\_ANAL\_TAIL\_MORPHOGENESIS,GOBP\_POST\_ANAL\_TAIL\_MORPHOGENESIS  
HP\_EXURIES,HP\_EXURIES  
HOIK\_MYELOID\_DENDRITIC\_CELL\_2011\_2012\_TIV\_ADULT\_3DY\_UP,HOIK\_MYELOID\_DENDRITIC\_CELL\_2011\_2012\_TIV\_ADULT\_3DY\_UP  
HOEK\_PBMc\_INACTIVATED\_INFLUENZA\_ADULT\_IDY\_UP,HOEK\_PBMc\_INACTIVATED\_INFLUENZA\_ADULT\_IDY\_UP  
HP\_DILATED\_INTERNAL\_AUDITORY\_CANAL,HP\_DILATED\_INTERNAL\_AUDITORY\_CANAL  
HP\_LACRIMAL\_DUCT\_APLASIA,HP\_LACRIMAL\_DUCT\_APLASIA  
GOMF\_NAD\_P\_PLUS\_PROTEIN\_ARGININE\_ADP\_RIBOSYLTRANSFERASE\_ACTIVITY,GOMF\_NAD\_P\_PLUS\_PROTEIN\_ARGININE\_ADP\_RIBOSYLTRANSFERASE\_ACTIVITY  
GOBP\_MEIOTIC\_DNA\_DOUBLE\_STRAND\_BREAK\_FORMATION,GOBP\_MEIOTIC\_DNA\_DOUBLE\_STRAND\_BREAK\_FORMATION  
GOBP\_CHIASMA\_ASSEMBLY,GOBP\_CHIASMA\_ASSEMBLY  
HOEK\_MONOCYTE\_2011\_2012\_TIV\_ADULT\_3DY\_UP,HOEK\_MONOCYTE\_2011\_2012\_TIV\_ADULT\_3DY\_UP  
GOBP\_ANTI\_BACTERIAL\_HUMORAL\_RESPONSE,GOBP\_ANTI\_BACTERIAL\_HUMORAL\_RESPONSE  
GOBP\_POSITIVE\_REGULATION\_OF\_CHONDROCYTE\_PROLIFERATION,GOBP\_POSITIVE\_REGULATION\_OF\_CHONDROCYTE\_PROLIFERATION  
HP\_USUAL\_INTERSTITIAL\_PNEUMONIA,HP\_USUAL\_INTERSTITIAL\_PNEUMONIA  
GOBP\_REGULATION\_OF\_MORPHOGENESIS\_OF\_A\_BRANCHING\_STRUCTURE,GOBP\_REGULATION\_OF\_MORPHOGENESIS\_OF\_A\_BRANCHING\_STRUCTURE