

CELL\_VS\_ERYTHTROBLAST\_UP, GSE27786\_CD4\_TCELL\_VS\_ERYTHTROBLAST\_UP

GSE27786\_ERYTHROBLAST\_VS\_MONO\_MAC\_DN, GSE27786\_ERYTHROBLAST\_VS\_MONO\_MAC\_UP  
GSE27786\_LIN\_NEG\_VS\_ERYTHROBLAST\_UP, GSE27786\_LIN\_NEG\_VS\_ERYTHROBLAST\_UP  
GSE27786\_NKCELL\_VS\_ERYTHROBLAST\_UP, GSE27786\_NKCELL\_VS\_ERYTHROBLAST\_UP  
GSE27786\_NKCELL\_VS\_ERYTHROBLAST\_UP, GSE27786\_NKCELL\_VS\_ERYTHROBLAST\_UP  
GSE18893\_CTRL\_VS\_TNF\_TREATED\_TCONV\_24H\_UP, GSE18893\_CTRL\_VS\_TNF\_TREATED\_TCONV\_24H\_UP  
GSE27786\_ERYTHROBLAST\_VS\_NEUTROPHIL\_DN, GSE27786\_ERYTHROBLAST\_VS\_NEUTROPHIL\_DN  
GSE27786\_LIN\_NEG\_VS\_NKCELL\_DN, GSE27786\_LIN\_NEG\_VS\_NKCELL\_DN  
GSE14308\_TH1\_VS\_TH17\_DN, GSE14308\_TH1\_VS\_TH17\_DN  
GSE34515\_CD16\_POS\_MONOCYTE\_VS\_DC\_UP, GSE34515\_CD16\_POS\_MONOCYTE\_VS\_DC\_UP  
GSE27434\_WT\_VS\_DNMT1\_KO\_TREG\_UP, GSE27434\_WT\_VS\_DNMT1\_KO\_TREG\_UP  
GSE27786\_LIN\_NEG\_VS\_NKCELL\_DN, GSE27786\_LIN\_NEG\_VS\_NKCELL\_DN  
GSE27786\_LSK\_VS\_CD4\_TCELL\_DN, GSE27786\_LSK\_VS\_CD4\_TCELL\_DN  
GSE27786\_NEUTROPHIL\_VS\_MONO\_MAC\_UP, GSE27786\_NEUTROPHIL\_VS\_MONO\_MAC\_UP  
GSE10240\_IL22\_VS\_IL22\_AND\_IL17\_STIM\_PRIMARY\_BRONCHIAL\_EPITHELIAL\_CELLS\_UP, GSE10240\_IL22\_VS\_IL22\_AND\_IL17\_STIM\_PRIMARY\_BRONCHIAL\_EPITHELIAL\_CELLS\_UP  
MIR6768\_5P, MIR6768\_5P  
GSE7348\_UNSTIM\_VS\_LPS\_STIM\_MACROPHAGE\_UP, GSE7348\_UNSTIM\_VS\_LPS\_STIM\_MACROPHAGE\_UP  
GSE4590\_LARGE\_PRE\_BCELL\_VS\_VPREB\_POS\_LARGE\_PRE\_BCELL\_DN, GSE4590\_LARGE\_PRE\_BCELL\_VS\_VPREB\_POS\_LARGE\_PRE\_BCELL\_DN  
GSE18893\_CTRL\_VS\_TNF\_TREATED\_TREG\_24H\_DN, GSE18893\_CTRL\_VS\_TNF\_TREATED\_TREG\_24H\_DN  
GSE11961\_MARGINAL\_ZONE\_BCELL\_VS\_GERMINAL\_CENTER\_BCELL\_DAY40\_DN, GSE11961\_MARGINAL\_ZONE\_BCELL\_VS\_GERMINAL\_CENTER\_BCELL\_DAY40\_DN  
GSE14308\_TH2\_VS\_TH1\_DN, GSE14308\_TH2\_VS\_TH1\_DN  
GSE27786\_LIN\_NEG\_VS\_MONO\_MAC\_DN, GSE27786\_LIN\_NEG\_VS\_MONO\_MAC\_DN  
GSE26669\_CD4\_VS\_CD8\_TCELL\_IN\_MLR\_COSTIM\_BLOCK\_DN, GSE26669\_CD4\_VS\_CD8\_TCELL\_IN\_MLR\_COSTIM\_BLOCK\_DN  
GSE27786\_LSK\_VS\_NKCELL\_DN, GSE27786\_LSK\_VS\_NKCELL\_DN  
DER\_IFN\_BETA\_RESPONSE\_UP, DER\_IFN\_BETA\_RESPONSE\_UP  
GOBP\_REGULATION\_OF\_DNA\_REPAIR, GOBP\_REGULATION\_OF\_DNA\_REPAIR  
GSE11961\_GERMINAL\_CENTER\_BCELL\_DAY7\_VS\_MEMORY\_BCELL\_DAY40\_UP, GSE11961\_GERMINAL\_CENTER\_BCELL\_DAY7\_VS\_MEMORY\_BCELL\_DAY40\_UP  
GSE21379\_TFH\_VS\_NON\_TFH\_CD4\_TCELL\_UP, GSE21379\_TFH\_VS\_NON\_TFH\_CD4\_TCELL\_UP  
GOBP\_REGULATION\_OF\_DOUBLE\_STRAND\_BREAK\_REPAIR, GOBP\_REGULATION\_OF\_DOUBLE\_STRAND\_BREAK\_REPAIR  
GOCC\_SITE\_OF\_POLARIZED\_GROWTH, GOCC\_SITE\_OF\_POLARIZED\_GROWTH  
REACTOME\_CIRCADIAN\_CLOCK, REACTOME\_CIRCADIAN\_CLOCK  
GOBP\_REGULATION\_OF\_VIRAL\_TRANSCRIPTION, GOBP\_REGULATION\_OF\_VIRAL\_TRANSCRIPTION  
GOBP\_INTRACELLULAR\_STEROID\_HORMONE\_RECEPTOR\_SIGNALING\_PATHWAY, GOBP\_INTRACELLULAR\_STEROID\_HORMONE\_RECEPTOR\_SIGNALING\_PATHWAY  
GOBP\_NEGATIVE\_REGULATION\_OF\_BINDING, GOBP\_NEGATIVE\_REGULATION\_OF\_BINDING  
REACTOME\_INTERFERON\_GAMMA\_SIGNALING, REACTOME\_INTERFERON\_GAMMA\_SIGNALING  
MIR4697\_3P, MIR4697\_3P  
MODULE\_567, MODULE\_567  
GOBP\_REGULATION\_OF\_DOUBLE\_STRAND\_BREAK\_REPAIR\_VIA\_HOMOLOGOUS\_RECOMBINATION, GOBP\_REGULATION\_OF\_DOUBLE\_STRAND\_BREAK\_REPAIR\_VIA\_HOMOLOGOUS\_RECOMBINATION  
HP\_NEOPLASM\_OF\_THE\_LIVER, HP\_NEOPLASM\_OF\_THE\_LIVER  
GOBP\_REGULATION\_OF\_TRANSCRIPTION\_BY\_RNA\_POLYMERASE\_I, GOBP\_REGULATION\_OF\_TRANSCRIPTION\_BY\_RNA\_POLYMERASE\_I  
GOMF\_HYDROLASE\_ACTIVITY\_ACTING\_ON\_GLYCOSYL\_BONDS, GOMF\_HYDROLASE\_ACTIVITY\_ACTING\_ON\_GLYCOSYL\_BONDS  
DCA\_UP.V1\_DN, DCA\_UP.V1\_DN  
GOBP\_AMINOGLYCAN\_CATABOLIC\_PROCESS, GOBP\_AMINOGLYCAN\_CATABOLIC\_PROCESS  
GOBP\_PROTEIN\_ADP\_RIBOSYLATION, GOBP\_PROTEIN\_ADP\_RIBOSYLATION  
GSE37301\_PRO\_BCELL\_VS\_CD4\_TCELL\_DN, GSE37301\_PRO\_BCELL\_VS\_CD4\_TCELL\_DN  
GOBP\_REGULATION\_OF\_FAT\_CELL\_DIFFERENTIATION, GOBP\_REGULATION\_OF\_FAT\_CELL\_DIFFERENTIATION  
BMI1\_DN.V1\_DN, BMI1\_DN.V1\_DN  
GSE23321\_CENTRAL\_MEMORY\_VS\_NAIVE\_CD8\_TCELL\_DN, GSE23321\_CENTRAL\_MEMORY\_VS\_NAIVE\_CD8\_TCELL\_DN  
GOBP\_GLIAL\_CELL\_DEVELOPMENT, GOBP\_GLIAL\_CELL\_DEVELOPMENT  
MIR20B\_3P, MIR20B\_3P  
GOMF\_ESTROGEN\_RECEPTOR\_BINDING, GOMF\_ESTROGEN\_RECEPTOR\_BINDING  
KENNY\_CTNNB1\_TARGETS\_DN, KENNY\_CTNNB1\_TARGETS\_DN  
MIR3199, MIR3199  
MIR371B\_3P, MIR371B\_3P  
PID\_BETA\_CATENIN\_DEG\_PATHWAY, PID\_BETA\_CATENIN\_DEG\_PATHWAY  
MIR8052, MIR8052  
GOMF\_HYDROLASE\_ACTIVITY\_HYDROLYZING\_O\_GLYCOSYL\_COMPOUNDS, GOMF\_HYDROLASE\_ACTIVITY\_HYDROLYZING\_O\_GLYCOSYL\_COMPOUNDS  
MIR4758\_3P, MIR4758\_3P  
GOBP\_PROTEIN\_INSERTION\_INTO\_ER\_MEMBRANE, GOBP\_PROTEIN\_INSERTION\_INTO\_ER\_MEMBRANE  
GOMF\_MEMBRANE\_INSERTASE\_ACTIVITY, GOMF\_MEMBRANE\_INSERTASE\_ACTIVITY  
MIR759, MIR759  
HP\_HYPERCHOLESTEROLEMIA, HP\_HYPERCHOLESTEROLEMIA  
HP\_ABNORMAL\_PANCREAS\_MORPHOLOGY, HP\_ABNORMAL\_PANCREAS\_MORPHOLOGY  
REACTOME\_INSULIN\_PROCESSING, REACTOME\_INSULIN\_PROCESSING  
VILMAS\_NOTCH1\_TARGETS\_DN, VILMAS\_NOTCH1\_TARGETS\_DN  
SERVITJA\_LIVER\_HNF1A\_TARGETS\_DN, SERVITJA\_LIVER\_HNF1A\_TARGETS\_DN  
GOBP\_TAIL\_ANCHORED\_MEMBRANE\_PROTEIN\_INSERTION\_INTO\_ER\_MEMBRANE, GOBP\_TAIL\_ANCHORED\_MEMBRANE\_PROTEIN\_INSERTION\_INTO\_ER\_MEMBRANE  
GOBP\_NEGATIVE\_REGULATION\_OF\_FAT\_CELL\_DIFFERENTIATION, GOBP\_NEGATIVE\_REGULATION\_OF\_FAT\_CELL\_DIFFERENTIATION  
GOBP\_PROTEIN\_INSERTION\_INTO\_ER\_MEMBRANE\_BY\_STOP\_TRANSFER\_MEMBRANE\_ANCHOR\_SEQUENCE, GOBP\_PROTEIN\_INSERTION\_INTO\_ER\_MEMBRANE\_BY\_STOP\_TRANSFER\_MEMBRANE\_ANCHOR\_SEQUENCE  
GOCC EMC\_COMPLEX, GOCC EMC\_COMPLEX  
GOCC\_SPERM\_PRINCIPAL\_PIECE, GOCC\_SPERM\_PRINCIPAL\_PIECE  
GOBP\_ERYTHROCYTE\_DEVELOPMENT, GOBP\_ERYTHROCYTE\_DEVELOPMENT  
GSE40666\_UNTREATED\_VS\_IFNA\_STIM\_CD8\_TCELL\_90MIN\_UP, GSE40666\_UNTREATED\_VS\_IFNA\_STIM\_CD8\_TCELL\_90MIN\_UP  
HP\_ANAL\_STENOSIS, HP\_ANAL\_STENOSIS  
MIR6086, MIR6086  
AACGGTT\_MIR451, AACGGTT\_MIR451  
GOBP\_RESPONSE\_TO\_EPINEPHRINE, GOBP\_RESPONSE\_TO\_EPINEPHRINE  
GOBP\_HISTONE\_H4\_DEACETYLATION, GOBP\_HISTONE\_H4\_DEACETYLATION  
REACTOME\_SPERM\_MOTILITY\_AND\_TAXES, REACTOME\_SPERM\_MOTILITY\_AND\_TAXES  
MIR4294, MIR4294  
GOBP\_NEGATIVE\_REGULATION\_OF\_GLIOGENESIS, GOBP\_NEGATIVE\_REGULATION\_OF\_GLIOGENESIS  
WP\_CANONICAL\_AND\_NONCANONICAL\_NOTCH\_SIGNALING, WP\_CANONICAL\_AND\_NONCANONICAL\_NOTCH\_SIGNALING  
GOBP\_SEMICIRCULAR\_CANAL\_DEVELOPMENT, GOBP\_SEMICIRCULAR\_CANAL\_DEVELOPMENT  
KEGG\_CIRCADIAN\_RHYTHM\_MAMMAL, KEGG\_CIRCADIAN\_RHYTHM\_MAMMAL  
GOBP\_REGULATION\_OF\_MYELINATION, GOBP\_REGULATION\_OF\_MYELINATION  
GOBP\_NEGATIVE\_REGULATION\_OF\_LYMPHOCYTE\_MIGRATION, GOBP\_NEGATIVE\_REGULATION\_OF\_LYMPHOCYTE\_MIGRATION  
HP\_GLOMERULONEPHRITIS, HP\_GLOMERULONEPHRITIS  
chr15q14, chr15q14  
STEGEER\_ADIPOGENESIS\_DN, STEGER\_ADIPOGENESIS\_DN  
GOBP\_CDP\_DIACYLGLYCEROL\_BIOSYNTHETIC\_PROCESS, GOBP\_CDP\_DIACYLGLYCEROL\_BIOSYNTHETIC\_PROCESS  
GOBP\_NEGATIVE\_REGULATION\_OF\_RELAXATION\_OF\_MUSCLE, GOBP\_NEGATIVE\_REGULATION\_OF\_RELAXATION\_OF\_MUSCLE  
GOMF\_LYSOPHOSPHATIDIC\_ACID\_ACYLTRANSFERASE\_ACTIVITY, GOMF\_LYSOPHOSPHATIDIC\_ACID\_ACYLTRANSFERASE\_ACTIVITY  
GOBP\_COBALAMIN\_TRANSPORT, GOBP\_COBALAMIN\_TRANSPORT  
GOBP\_POSITIVE\_REGULATION\_OF\_NON\_CANONICAL\_WNT\_SIGNALING\_PATHWAY, GOBP\_POSITIVE\_REGULATION\_OF\_NON\_CANONICAL\_WNT\_SIGNALING\_PATHWAY  
GOBP\_NEGATIVE\_REGULATION\_OF\_MONONUCLEAR\_CELL\_MIGRATION, GOBP\_NEGATIVE\_REGULATION\_OF\_MONONUCLEAR\_CELL\_MIGRATION  
BIOCARTA\_IFNA\_PATHWAY, BIOCARTA\_IFNA\_PATHWAY  
WP\_IL10\_ANTIINFLAMMATORY\_SIGNALING\_PATHWAY, WP\_IL10\_ANTIINFLAMMATORY\_SIGNALING\_PATHWAY  
HP\_DECREASED\_SERUM\_COMPLEMENT\_C3, HP\_DECREASED\_SERUM\_COMPLEMENT\_C3  
HP\_GONADOTROPIN\_DEFICIENCY, HP\_GONADOTROPIN\_DEFICIENCY  
GOCC\_GAMMA\_SECRETASE\_COMPLEX, GOCC\_GAMMA\_SECRETASE\_COMPLEX  
HP\_LOP\_EAR, HP\_LOP\_EAR  
GOBP\_HISTONE\_CITRULLINATION, GOBP\_HISTONE\_CITRULLINATION  
GOMF\_PROTEIN\_ARGININE\_DEIMINASE\_ACTIVITY, GOMF\_PROTEIN\_ARGININE\_DEIMINASE\_ACTIVITY  
GOMF\_IMMUNOGLOBULIN\_RECEPTOR\_ACTIVITY, GOMF\_IMMUNOGLOBULIN\_RECEPTOR\_ACTIVITY  
HP\_CROSSED\_FUSED\_RENAL\_ECTOPIA, HP\_CROSSED\_FUSED\_RENAL\_ECTOPIA  
GOMF\_PEPTIDOGLYCAN\_MURALYTIC\_ACTIVITY, GOMF\_PEPTIDOGLYCAN\_MURALYTIC\_ACTIVITY  
WP\_TYPE\_II\_DIABETES\_MELLITUS, WP\_TYPE\_II\_DIABETES\_MELLITUS  
GOMF\_GLUCOSYLTRANSFERASE\_ACTIVITY, GOMF\_GLUCOSYLTRANSFERASE\_ACTIVITY  
HP\_HEPATOBLASTOMA, HP\_HEPATOBLASTOMA  
GOBP\_LATERAL\_SPROUTING\_FROM\_AN\_EPITHELIUM, GOBP\_LATERAL\_SPROUTING\_FROM\_AN\_EPITHELIUM  
KUROKAWA\_LIVER\_CANCER\_EARLY\_RECURRENCE\_DN, KUROKAWA\_LIVER\_CANCER\_EARLY\_RECURRENCE\_DN  
GOBP\_DETERMINATION\_OF\_ADULT\_LIFESPAN, GOBP\_DETERMINATION\_OF\_ADULT\_LIFESPAN  
HP\_HYPOKALEMIC\_METABOLIC\_ALKALOSIS, HP\_HYPOKALEMIC\_METABOLIC\_ALKALOSIS  
WP\_CODEINE\_AND\_MORPHINE\_METABOLISM, WP\_CODEINE\_AND\_MORPHINE\_METABOLISM  
GOBP\_MONOTERPENOID\_METABOLIC\_PROCESS, GOBP\_MONOTERPENOID\_METABOLIC\_PROCESS  
GOBP\_NEGATIVE\_REGULATION\_OF\_DEFENSE\_RESPONSE\_TO\_BACTERIUM, GOBP\_NEGATIVE\_REGULATION\_OF\_DEFENSE\_RESPONSE\_TO\_BACTERIUM  
REACTOME\_BIOSYNTHESIS\_OF\_MARESIN\_LIKE\_SPMS, REACTOME\_BIOSYNTHESIS\_OF\_MARESIN\_LIKE\_SPMS  
GOBP\_OLFACTORY\_BEHAVIOR, GOBP\_OLFACTORY\_BEHAVIOR  
JU\_AGING\_TERC\_TARGETS\_UP, JU\_AGING\_TERC\_TARGETS\_UP  
HP\_ABNORMALITY\_OF\_THE\_INTERNAL\_AUDITORY\_CANAL, HP\_ABNORMALITY\_OF\_THE\_INTERNAL\_AUDITORY\_CANAL  
HP\_HYPOKALEMIC\_ALKALOSIS, HP\_HYPOKALEMIC\_ALKALOSIS  
WP\_TYPE\_III\_INTERFERON\_SIGNALING, WP\_TYPE\_III\_INTERFERON\_SIGNALING  
GOBP\_DETECTION\_OF\_TEMPERATURE\_STIMULUS\_INVOLVED\_IN\_SENSORY\_PERCEPTION, GOBP\_DETECTION\_OF\_TEMPERATURE\_STIMULUS\_INVOLVED\_IN\_SENSORY\_PERCEPTION  
GOCC\_PARANODE\_REGION\_OF\_AXON, GOCC\_PARANODE\_REGION\_OF\_AXON  
HP\_PARATHYROID\_DYSGENESIS, HP\_PARATHYROID\_DYSGENESIS  
GOBP\_OLIGODENDROCYTE\_PROGENITOR\_PROLIFERATION, GOBP\_OLIGODENDROCYTE\_PROGENITOR\_PROLIFERATION  
GOMF\_ACYLGLYCEROL\_O\_ACYLTRANSFERASE\_ACTIVITY, GOMF\_ACYLGLYCEROL\_O\_ACYLTRANSFERASE\_ACTIVITY  
HARALAMBIEVA\_PBMFC\_FLUARIX\_AGE\_50\_74YO\_CORR\_WITH\_28D\_MEM\_B\_CELL\_RESPONSE\_AT\_28DY\_LATE\_GENE\_EXPR\_INDIVID\_GENE\_MODELS\_PRED\_PEAK\_B\_CELL\_ELISPOT\_RESP\_NEGATIVE, HARALAMBIEVA\_PBMFC\_FLUARIX\_AGE\_50\_74YO\_CORR\_WITH\_28D\_MEM\_B\_CELL\_RESPONSE\_AT\_28DY\_LATE\_GENE\_EXPR\_INDIVID\_GENE\_MODELS\_PRED\_PEAK\_B\_CELL\_ELISPOT\_RESP\_NEGATIVE  
GOBP\_PEPTIDOGLYCAN\_METABOLIC\_PROCESS, GOBP\_PEPTIDOGLYCAN\_METABOLIC\_PROCESS  
GOBP\_REGULATION\_OF\_RELAXATION\_OF\_CARDIAC\_MUSCLE, GOBP\_REGULATION\_OF\_RELAXATION\_OF\_CARDIAC\_MUSCLE  
REACTOME\_CYP2E1\_REACTIONS, REACTOME\_CYP2E1\_REACTIONS  
GOBP\_DETECTION\_OF\_TEMPERATURE\_STIMULUS, GOBP\_DETECTION\_OF\_TEMPERATURE\_STIMULUS  
BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_LOW\_MOI\_INFECTION\_A594\_ACE2 EXPRESSING\_CELLS\_DN, BLANCO\_MELO\_COVID19\_SARS\_COV\_2\_LOW\_MOI\_INFECTION\_A594\_ACE2 EXPRESSING\_CELLS\_DN  
chr4q35, chr4q35  
GOBP\_ALKALOID\_METABOLIC\_PROCESS, GOBP\_ALKALOID\_METABOLIC\_PROCESS  
GOMF\_PEPTIDOGLYCAN\_IMMUNE\_RECEPTOR\_ACTIVITY, GOMF\_PEPTIDOGLYCAN\_IMMUNE\_RECEPTOR\_ACTIVITY  
GOBP\_PHENYLPROPANOID\_METABOLIC\_PROCESS, GOBP\_PHENYLPROPANOID\_METABOLIC\_PROCESS  
ISHIKAWA\_STING\_SIGNALING, ISHIKAWA\_STING\_SIGNALING  
GOBP\_DOPAMINERGIC\_NEURON\_DIFFERENTIATION, GOBP\_DOPAMINERGIC\_NEURON\_DIFFERENTIATION  
REACTOME\_FATTY\_ACIDS, REACTOME\_FATTY\_ACIDS