

GSE42021\_CD24INT\_TREG\_VS\_CD24INT\_THYMUS\_UP, GSE42021\_CD24INT\_TREG\_VS\_CD24INT\_THYMUS\_UP  
GSE24726\_WT\_VS\_E2\_2\_KO\_PDC\_DAY6\_POST\_DELETION\_DN, GSE24726\_WT\_VS\_E2\_2\_KO\_PDC\_DAY6\_POST\_DELETION\_DN  
GSE24726\_WT\_VS\_E2\_2\_KO\_PDC\_DAY6\_POST\_DELETION\_DN, GSE24726\_WT\_VS\_E2\_2\_KO\_PDC\_DAY6\_POST\_DELETION\_DN  
GSE26343\_WT\_VS\_NFAT5\_KO\_MACROPHAGE\_UP, GSE26343\_WT\_VS\_NFAT5\_KO\_MACROPHAGE\_UP  
GSE7348\_UNSTIM\_VS\_TOLERIZED\_AND\_LPS\_STIM\_MACROPHAGE\_UP, GSE7348\_UNSTIM\_VS\_TOLERIZED\_AND\_LPS\_STIM\_MACROPHAGE\_UP  
GSE23308\_WT\_VS\_MINERALCORTICOID\_REC\_KO\_MACROPHAGE\_UP, GSE23308\_WT\_VS\_MINERALCORTICOID\_REC\_KO\_MACROPHAGE\_UP  
GSE11864\_CSFL\_VS\_CSFL\_IFNG\_PAM3CYS\_IN\_MAC\_UP, GSE11864\_CSFL\_VS\_CSFL\_IFNG\_PAM3CYS\_IN\_MAC\_UP  
GSE10240\_IL17\_VS\_IL17\_AND\_IL22\_STIM\_PRIMARY\_BRONCHIAL\_EPITHELIAL\_CELLS\_UP, GSE10240\_IL17\_VS\_IL17\_AND\_IL22\_STIM\_PRIMARY\_BRONCHIAL\_EPITHELIAL\_CELLS\_UP  
GSE46606\_IRF4\_KO\_VS\_WT\_UNSTIM\_BCELL\_UP, GSE46606\_IRF4\_KO\_VS\_WT\_UNSTIM\_BCELL\_UP  
GSE2197\_CPG\_DNA\_VS\_UNTREATED\_IN\_DC\_DN, GSE2197\_CPG\_DNA\_VS\_UNTREATED\_IN\_DC\_DN  
GSE18804\_SPLEEN\_MACROPHAGE\_VS\_BRAIN\_TUMORAL\_MACROPHAGE\_DN, GSE18804\_SPLEEN\_MACROPHAGE\_VS\_BRAIN\_TUMORAL\_MACROPHAGE\_DN  
GSE42724\_MEMORY\_BCELL\_VS\_PLASMABLAST\_DN, GSE42724\_MEMORY\_BCELL\_VS\_PLASMABLAST\_DN  
GSE41867\_NAIVE\_VS\_DAYS1\_LCMV\_ARMSTRONG\_EFFECTOR\_CD8\_TCELL\_DN, GSE41867\_NAIVE\_VS\_DAYS1\_LCMV\_ARMSTRONG\_EFFECTOR\_CD8\_TCELL\_DN  
GSE8835\_CD4\_VS\_CD8\_TCELL\_UP, GSE8835\_CD4\_VS\_CD8\_TCELL\_UP  
GSE9037\_CTRL\_VS\_LPS\_4H\_STIM\_BMDM\_UP, GSE9037\_CTRL\_VS\_LPS\_4H\_STIM\_BMDM\_UP  
GSE22919\_RESTING\_VS\_IL2\_IL12\_IL15\_STIM\_NK\_CELL\_DN, GSE22919\_RESTING\_VS\_IL2\_IL12\_IL15\_STIM\_NK\_CELL\_DN  
GSE9037\_CTRL\_VS\_LPS\_4H\_STIM\_IRAK4\_KO\_BMDM\_UP, GSE9037\_CTRL\_VS\_LPS\_4H\_STIM\_IRAK4\_KO\_BMDM\_UP  
GSE9239\_CTRL\_VS\_TNF\_INHIBITOR\_TREATED\_DC\_UP, GSE9239\_CTRL\_VS\_TNF\_INHIBITOR\_TREATED\_DC\_UP  
GSE42724\_NAIVE\_BCELL\_VS\_PLASMABLAST\_DN, GSE42724\_NAIVE\_BCELL\_VS\_PLASMABLAST\_DN  
GSE37534\_GW1929\_VS\_ROSIGLITAZONE\_TREATED\_CD4\_TCELL\_PPARG1\_FOXP3\_TRANSduced\_DN, GSE37534\_GW1929\_VS\_ROSIGLITAZONE\_TREATED\_CD4\_TCELL\_PPARG1\_FOXP3\_TRANSduced\_DN  
HP\_APLASIA\_HYPOPLASIA\_OF\_THE\_EAR, HP\_APLASIA\_HYPOPLASIA\_OF\_THE\_EAR  
MIR1285\_3P, MIR1285\_3P  
MIR3920, MIR3920  
GSE28737\_WT\_VS\_BCL6\_HET\_MARGINAL\_ZONE\_BCELL\_UP, GSE28737\_WT\_VS\_BCL6\_HET\_MARGINAL\_ZONE\_BCELL\_UP  
GSE2770\_IL12\_VS\_IL4\_TREATED\_ACT\_CD4\_TCELL\_2H\_UP, GSE2770\_IL12\_VS\_IL4\_TREATED\_ACT\_CD4\_TCELL\_2H\_UP  
GSE39152\_CD103\_NEG\_VS\_POS\_MEMORY\_CD8\_TCELL\_UP, GSE39152\_CD103\_NEG\_VS\_POS\_MEMORY\_CD8\_TCELL\_UP  
MIR5189\_5P, MIR5189\_5P  
GOBP\_NEGATIVE\_REGULATION\_OF\_DNA\_METABOLIC\_PROCESS, GOBP\_NEGATIVE\_REGULATION\_OF\_DNA\_METABOLIC\_PROCESS  
MIR6509\_3P, MIR6509\_3P  
GSE30083\_SP1\_VS\_SP3\_THYMOCYTE\_DN, GSE30083\_SP1\_VS\_SP3\_THYMOCYTE\_DN  
GSE22282\_HYPOXIA\_VS\_NORMOXIA\_MYELOID\_DC\_DN, GSE22282\_HYPOXIA\_VS\_NORMOXIA\_MYELOID\_DC\_DN  
HP\_CLEFT\_LIP, HP\_CLEFT\_LIP  
MIR3190\_3P, MIR3190\_3P  
MIR6860, MIR6860  
HP\_COARCTATION\_OF\_AORTA, HP\_COARCTATION\_OF\_AORTA  
MIR2115\_5P, MIR2115\_5P  
MIR612, MIR612  
GOMF\_TRANSFERASE\_ACTIVITY\_TRANSFERRING\_HEXOSYL\_GROUPS, GOMF\_TRANSFERASE\_ACTIVITY\_TRANSFERRING\_HEXOSYL\_GROUPS  
GSE32901\_NAIVE\_VS\_THI7\_ENRICHED\_CD4\_TCELL\_UP, GSE32901\_NAIVE\_VS\_THI7\_ENRICHED\_CD4\_TCELL\_UP  
GOMF\_REPRESSING\_TRANSCRIPTION\_FACTOR\_BINDING, GOMF\_REPRESSING\_TRANSCRIPTION\_FACTOR\_BINDING  
GOMF\_PROTEIN\_SERINE\_PHOSPHATASE\_ACTIVITY, GOMF\_PROTEIN\_SERINE\_PHOSPHATASE\_ACTIVITY  
HP\_MUSCLE\_SPAASM, HP\_MUSCLE\_SPAASM  
MIR4716\_5P, MIR4716\_5P  
GOCC\_GOLGI\_CISTERNA\_MEMBRANE, GOCC\_GOLGI\_CISTERNA\_MEMBRANE  
MIR1260A\_MIR1260B, MIR1260A\_MIR1260B  
ATGTCAC\_MIR489, ATGTCAC\_MIR489  
HP\_ABNORMAL\_CARDIAC\_VENTRICULAR\_FUNCTION, HP\_ABNORMAL\_CARDIAC\_VENTRICULAR\_FUNCTION  
HP\_SHORT\_FOOT, HP\_SHORT\_FOOT  
HP\_ABNORMAL\_ERYTHROCYTE\_ENZYME\_LEVEL, HP\_ABNORMAL\_ERYTHROCYTE\_ENZYME\_LEVEL  
GOBP\_GLYCOPHINGOLIPID\_METABOLIC\_PROCESS, GOBP\_GLYCOPHINGOLIPID\_METABOLIC\_PROCESS  
HP\_ABNORMAL\_HEMOGLOBIN, HP\_ABNORMAL\_HEMOGLOBIN  
MIR6862\_5P, MIR6862\_5P  
GOBP\_CHONDROITIN\_SULFATE\_PROTEOGLYCAN\_METABOLIC\_PROCESS, GOBP\_CHONDROITIN\_SULFATE\_PROTEOGLYCAN\_METABOLIC\_PROCESS  
GSE2770\_UNTREATED\_VS\_TGFB\_AND\_IL12\_TREATED\_ACT\_CD4\_TCELL\_2H\_UP, GSE2770\_UNTREATED\_VS\_TGFB\_AND\_IL12\_TREATED\_ACT\_CD4\_TCELL\_2H\_UP  
GOBP\_POSITIVE\_REGULATION\_OF\_DNA\_REPLICATION, GOBP\_POSITIVE\_REGULATION\_OF\_DNA\_REPLICATION  
GOBP\_PROTEIN\_O\_LINKED\_GLYCOSYLATION, GOBP\_PROTEIN\_O\_LINKED\_GLYCOSYLATION  
DHIMAN\_PBMIC\_ATTENUVAX\_AGE\_15\_25YO\_SUBQ\_7\_OR\_14DY\_UP, DHIMAN\_PBMIC\_ATTENUVAX\_AGE\_15\_25YO\_SUBQ\_7\_OR\_14DY\_UP  
HP\_POSTAXIAL\_FOOT\_POLYDACTYLY, HP\_POSTAXIAL\_FOOT\_POLYDACTYLY  
RUVBL2\_TARGET\_GENES, RUVBL2\_TARGET\_GENES  
MUELLER\_COMMON\_TARGETS\_OF\_AML\_FUSIONS\_UP, MUELLER\_COMMON\_TARGETS\_OF\_AML\_FUSIONS\_UP  
REACTOME\_PLATELET\_CALCIIUM\_HOMEOSTASIS, REACTOME\_PLATELET\_CALCIIUM\_HOMEOSTASIS  
GOBP\_PEPTIDYL\_TYROSINE\_AUTOPHOSPHORYLATION, GOBP\_PEPTIDYL\_TYROSINE\_AUTOPHOSPHORYLATION  
GSE45365\_NK\_CELL\_VS\_CD11B\_DC\_UP, GSE45365\_NK\_CELL\_VS\_CD11B\_DC\_UP  
HP\_MICROTIA\_THIRD\_DEGREE, HP\_MICROTIA\_THIRD\_DEGREE  
GSE13762\_CTRL\_VS\_125\_VITAMIND\_DAYS5\_DC\_DN, GSE13762\_CTRL\_VS\_125\_VITAMIND\_DAYS5\_DC\_DN  
MIR26A\_1\_3P, MIR26A\_1\_3P  
GOBP\_CERAMIDE\_CATABOLIC\_PROCESS, GOBP\_CERAMIDE\_CATABOLIC\_PROCESS  
GOMF\_TRANSMEMBRANE\_RECEPTOR\_PROTEIN\_SERINE\_THREONINE\_KINASE\_ACTIVITY, GOMF\_TRANSMEMBRANE\_RECEPTOR\_PROTEIN\_SERINE\_THREONINE\_KINASE\_ACTIVITY  
GOBP\_RESPONSE\_TO\_ISCHEMIA, GOBP\_RESPONSE\_TO\_ISCHEMIA  
MIR26A\_2\_3P, MIR26A\_2\_3P  
HP\_APLASIA\_HYPOPLASIA\_OF\_THE\_TIBIA, HP\_APLASIA\_HYPOPLASIA\_OF\_THE\_TIBIA  
GOBP\_REGULATION\_OF\_CHROMATIN\_BINDING, GOBP\_REGULATION\_OF\_CHROMATIN\_BINDING  
MIR7109\_3P, MIR7109\_3P  
HERNANDEZ\_ABERRANT\_MITOSIS\_BY\_DOCETACEL\_2NM\_UP, HERNANDEZ\_ABERRANT\_MITOSIS\_BY\_DOCETACEL\_2NM\_UP  
GSE29618\_PRE\_VS\_DAY7\_FLU\_VACCINE\_PDC\_UP, GSE29618\_PRE\_VS\_DAY7\_FLU\_VACCINE\_PDC\_UP  
HP\_MOTOR\_DETERIORATION, HP\_MOTOR\_DETERIORATION  
HP\_ABNORMALITY\_OF\_THE\_SUPERIOR\_CEREBELLAR\_PEDUNCLE, HP\_ABNORMALITY\_OF\_THE\_SUPERIOR\_CEREBELLAR\_PEDUNCLE  
MIR1298\_3P, MIR1298\_3P  
GSE40274\_FOXP3\_VS\_FOXP3\_AND\_HELIOS\_TRANSduced\_ACTIVATED\_CD4\_TCELL\_UP, GSE40274\_FOXP3\_VS\_FOXP3\_AND\_HELIOS\_TRANSduced\_ACTIVATED\_CD4\_TCELL\_UP  
GOBP\_POSITIVE\_REGULATION\_OF\_MITOCHONDRIAL\_FISSION, GOBP\_POSITIVE\_REGULATION\_OF\_MITOCHONDRIAL\_FISSION  
HP\_PSYCHOMOTOR\_DETERIORATION, HP\_PSYCHOMOTOR\_DETERIORATION  
GOBP\_NEGATIVE\_REGULATION\_OF\_CELL\_JUNCTION\_ASSEMBLY, GOBP\_NEGATIVE\_REGULATION\_OF\_CELL\_JUNCTION\_ASSEMBLY  
HP\_SELF\_MUTILATION, HP\_SELF\_MUTILATION  
KEGG\_GLYCOPHINGOLIPID\_BIOSYNTHESIS\_GLOBO\_SERIES, KEGG\_GLYCOPHINGOLIPID\_BIOSYNTHESIS\_GLOBO\_SERIES  
GOBP\_STORE\_OPERATED\_CALCIIUM\_ENTRY, GOBP\_STORE\_OPERATED\_CALCIIUM\_ENTRY  
GOBP\_SEMINIFEROUS\_TUBULE\_DEVELOPMENT, GOBP\_SEMINIFEROUS\_TUBULE\_DEVELOPMENT  
HP\_ABNORMALITY\_OF\_THE\_PHALANGES\_OF\_THE\_HALLUX, HP\_ABNORMALITY\_OF\_THE\_PHALANGES\_OF\_THE\_HALLUX  
MIR296\_3P, MIR296\_3P  
MIR6763\_5P, MIR6763\_5P  
PAX5\_02, PAX5\_02  
GOBP\_NEGATIVE\_REGULATION\_OF\_CELL\_SUBSTRATE\_JUNCTION\_ORGANIZATION, GOBP\_NEGATIVE\_REGULATION\_OF\_CELL\_SUBSTRATE\_JUNCTION\_ORGANIZATION  
GOBP\_RETINA\_VASCULATURE\_DEVELOPMENT\_IN\_CAMERA\_TYPE\_EYE, GOBP\_RETINA\_VASCULATURE\_DEVELOPMENT\_IN\_CAMERA\_TYPE\_EYE  
HP\_CHORIORETINAL\_DYSPLASIA, HP\_CHORIORETINAL\_DYSPLASIA  
GOBP\_NEGATIVE\_REGULATION\_OF\_VASOCONSTRICTION, GOBP\_NEGATIVE\_REGULATION\_OF\_VASOCONSTRICTION  
GOBP\_DERMATAN\_SULFATE\_PROTEOGLYCAN\_METABOLIC\_PROCESS, GOBP\_DERMATAN\_SULFATE\_PROTEOGLYCAN\_METABOLIC\_PROCESS  
GOBP\_POSITIVE\_REGULATION\_OF\_PROTEIN\_DEACETYLATION, GOBP\_POSITIVE\_REGULATION\_OF\_PROTEIN\_DEACETYLATION  
REACTOME\_SYNTHESIS\_OF\_PIP3\_AT\_THE\_GOLGI\_MEMBRANE, REACTOME\_SYNTHESIS\_OF\_PIP3\_AT\_THE\_GOLGI\_MEMBRANE  
REACTOME\_ELEVATION\_OF\_CYTOSOLIC\_CA2\_LEVELS, REACTOME\_ELEVATION\_OF\_CYTOSOLIC\_CA2\_LEVELS  
HP\_OCCIPITAL\_ENCEPHALOCLE, HP\_OCCIPITAL\_ENCEPHALOCLE  
GOBP\_SPERM\_AXONEME\_ASSEMBLY, GOBP\_SPERM\_AXONEME\_ASSEMBLY  
GOCC\_ZONULA\_ADHERENS, GOCC\_ZONULA\_ADHERENS  
HP\_AXONAL\_DEGENERATION\_REGENERATION, HP\_AXONAL\_DEGENERATION\_REGENERATION  
HP\_CLITORAL\_HYPOPLASIA, HP\_CLITORAL\_HYPOPLASIA  
POMEROY\_MEDULLOBLASTOMA\_PROGNOSIS\_UP, POMEROY\_MEDULLOBLASTOMA\_PROGNOSIS\_UP  
REACTOME\_DAG\_AND\_IP3\_SIGNALING, REACTOME\_DAG\_AND\_IP3\_SIGNALING  
GOBP\_REGULATION\_OF\_HISTONE\_DEACETYLATION, GOBP\_REGULATION\_OF\_HISTONE\_DEACETYLATION  
GOBP\_POSITIVE\_REGULATION\_OF\_HISTONE\_DEACETYLATION, GOBP\_POSITIVE\_REGULATION\_OF\_HISTONE\_DEACETYLATION  
HOEK\_MONOCYTE\_2011\_2012\_TIV\_ADULT\_1DY\_DN, HOEK\_MONOCYTE\_2011\_2012\_TIV\_ADULT\_1DY\_DN  
GOMF\_HEXOSAMINIDASE\_ACTIVITY, GOMF\_HEXOSAMINIDASE\_ACTIVITY  
GOBP\_NEGATIVE\_REGULATION\_OF\_CELL\_MATRIX\_ADHESION, GOBP\_NEGATIVE\_REGULATION\_OF\_CELL\_MATRIX\_ADHESION  
GOBP\_ACID\_SECRETION, GOBP\_ACID\_SECRETION  
REACTOME\_MULTIFUNCTIONAL\_ANION\_EXCHANGERS, REACTOME\_MULTIFUNCTIONAL\_ANION\_EXCHANGERS  
GOBP\_VENOUS\_BLOOD\_VESSEL\_DEVELOPMENT, GOBP\_VENOUS\_BLOOD\_VESSEL\_DEVELOPMENT  
MIR11401, MIR11401  
HP\_FUSION\_OF\_THE\_CEREBELLAR\_HEMISPHERES, HP\_FUSION\_OF\_THE\_CEREBELLAR\_HEMISPHERES  
GOBP\_GLYCOLIPID\_CATABOLIC\_PROCESS, GOBP\_GLYCOLIPID\_CATABOLIC\_PROCESS  
HP\_SHORT\_COLUMELLA, HP\_SHORT\_COLUMELLA  
GOBP\_GANGLIOSIDE\_METABOLIC\_PROCESS, GOBP\_GANGLIOSIDE\_METABOLIC\_PROCESS  
GOBP\_OXALATE\_TRANSPORT, GOBP\_OXALATE\_TRANSPORT  
GOMF\_OXALATE\_TRANSMEMBRANE\_TRANSPORTER\_ACTIVITY, GOMF\_OXALATE\_TRANSMEMBRANE\_TRANSPORTER\_ACTIVITY  
chr15q23, chr15q23  
GOBP\_POLYOL\_CATABOLIC\_PROCESS, GOBP\_POLYOL\_CATABOLIC\_PROCESS  
GOMF\_LYSOPHOSPHOLIPID\_ACYLTRANSFERASE\_ACTIVITY, GOMF\_LYSOPHOSPHOLIPID\_ACYLTRANSFERASE\_ACTIVITY  
GOCC\_CHITOSOME, GOCC\_CHITOSOME  
HP\_ABNORMAL\_BOWEL\_SOUNDS, HP\_ABNORMAL\_BOWEL\_SOUNDS  
GOMF\_5\_3\_EXODEOXYRIBONUCLEASE\_ACTIVITY, GOMF\_5\_3\_EXODEOXYRIBONUCLEASE\_ACTIVITY  
HP\_DECREASED\_CERVICAL\_SPINE