## GSE40655 FOXO1 KO VS WT NTREG UP, GSE40655 FOXO1 KO VS WT NTREG UP GSE15330\_MEGAKARYOCYTE\_ERYTHROID\_PROGENITOR\_VS\_PRO\_BCELL\_UP, GSE15330\_MEGAKARYOCYTE\_ERYTHROID\_PROGENITOR\_VS\_PRO\_BCELL\_UP GSE34006\_A2AR\_KO\_VS\_A2AR\_AGONIST\_TREATED\_TREG\_DN, GSE34006\_A2AR\_KO\_VS\_A2AR\_AGONIST\_TREATED\_TREG\_DN GSE3039\_ALPHABETA\_CD8\_TCELL\_VS\_B1\_BCELL\_UP, GSE3039\_ALPHABETA\_CD8\_TCELL\_VS\_B1\_BCELL\_UP GSE17721\_LPS\_VS\_POLYIC\_2H\_BMDC\_DN, GSE17721\_LPS\_VS\_POLYIC\_2H\_BMDC\_DN GSE40273\_GATA1\_KO\_VS\_WT\_TREG\_DN, GSE40273\_GATA1\_KO\_VS\_WT\_TREG\_DN GSE38681\_WT\_VS\_LYL1\_KO\_LYMPHOID\_PRIMED\_MULTIPOTENT\_PROGENITOR\_DN, GSE38681\_WT\_VS\_LYL1\_KO\_LYMPHOID\_PRIMED\_MULTIPOTENT\_PROGENITOR\_DN GSE11961\_FOLLICULAR\_BCELL\_VS\_PLASMA\_CELL\_DAY7\_DN, GSE11961\_FOLLICULAR\_BCELL\_VS\_PLASMA\_CELL\_DAY7\_DN GSE26030\_TH1\_VS\_TH17\_DAY15\_POST\_POLARIZATION\_UP, GSE26030\_TH1\_VS\_TH17\_DAY15\_POST\_POLARIZATION\_UP GSE22601\_DOUBLE\_POSITIVE\_VS\_CD8\_SINGLE\_POSITIVE\_THYMOCYTE\_UP, GSE22601\_DOUBLE\_POSITIVE\_VS\_CD8\_SINGLE\_POSITIVE\_THYMOCYTE\_UP GSE15750\_DAY6\_VS\_DAY10\_EFF\_CD8\_TCELL\_DN, GSE15750\_DAY6\_VS\_DAY10\_EFF\_CD8\_TCELL\_DN GSE17721\_LPS\_VS\_POLYIC\_1H\_BMDC\_DN, GSE17721\_LPS\_VS\_POLYIC\_1H\_BMDC\_DN GSE339\_CD8POS\_VS\_CD4CD8DN\_DC\_IN\_CULTURE\_UP, GSE339\_CD8POS\_VS\_CD4CD8DN\_DC\_IN\_CULTURE\_UP GSE4748\_CTRL\_VS\_CYANOBACTERIUM\_LPSLIKE\_STIM\_DC\_3H\_UP, GSE4748\_CTRL\_VS\_CYANOBACTERIUM\_LPSLIKE\_STIM\_DC\_3H\_UP GSE17721\_POLYIC\_VS\_PAM3CSK4\_24H\_BMDC\_UP, GSE17721\_POLYIC\_VS\_PAM3CSK4\_24H\_BMDC\_UP GSE21546\_WT\_VS\_SAP1A\_KO\_AND\_ELK1\_KO\_DP\_THYMOCYTES\_DN, GSE21546\_WT\_VS\_SAP1A\_KO\_AND\_ELK1\_KO\_DP\_THYMOCYTES\_DN GSE32423\_MEMORY\_VS\_NAIVE\_CD8\_TCELL\_IL7\_UP, GSE32423\_MEMORY\_VS\_NAIVE\_CD8\_TCELL\_IL7\_UP GSE34156\_UNTREATED\_VS\_6H\_NOD2\_AND\_TLR1\_TLR2\_LIGAND\_TREATED\_MONOCYTE\_DN, GSE34156\_UNTREATED\_VS\_6H\_NOD2\_AND\_TLR1\_TLR2\_LIGAND\_TREATED\_MON GSE15750\_DAY6\_VS\_DAY10\_TRAF6KO\_EFF\_CD8\_TCELL\_DN, GSE15750\_DAY6\_VS\_DAY10\_TRAF6KO\_EFF\_CD8\_TCELL\_DN GSE15330\_GRANULOCYTE\_MONOCYTE\_PROGENITOR\_VS\_PRO\_BCELL\_DN, GSE15330\_GRANULOCYTE\_MONOCYTE\_PROGENITOR\_VS\_PRO\_BCELL\_DN GSE20198 UNTREATED VS IL12 TREATED ACT CD4 TCELL DN, GSE20198 UNTREATED VS IL12 TREATED ACT CD4 TCELL DN GSE15735 2H VS 12H HDAC INHIBITOR TREATED CD4 TCELL UP, GSE15735 2H VS 12H HDAC INHIBITOR TREATED CD4 TCELL UP GSE19888 ADENOSINE A3R INH VS\_TCELL\_MEMBRANES\_ACT\_MAST\_CELL\_UP, GSE19888\_ADENOSINE\_A3R\_INH\_VS\_TCELL\_MEMBRANES\_ACT\_MAST\_CELL\_UP GSE27786 BCELL VS CD4 TCELL DN, GSE27786 BCELL VS CD4 TCELL DN ATCATGA MIR433, ATCATGA MIR433 GSE7568\_IL4\_VS\_IL4\_AND\_DEXAMETHASONE\_TREATED\_MACROPHAGE\_DN, GSE7568\_IL4\_VS\_IL4\_AND\_DEXAMETHASONE\_TREATED\_MACROPHAGE\_DN GSE14415 FOXP3 KO NATURAL TREG VS TCONV UP, GSE14415 FOXP3 KO NATURAL TREG VS TCONV UP GSE17721 LPS VS CPG 16H BMDC UP, GSE17721 LPS VS CPG 16H BMDC UP GSE19888\_CTRL\_VS\_TCELL\_MEMBRANES\_ACT\_MAST\_CELL\_PRETREAT\_A3R\_INH\_DN, GSE19888\_CTRL\_VS\_TCELL\_MEMBRANES\_ACT\_MAST\_CELL\_PRETREAT\_A3R\_INH\_DN GSE37563\_WT\_VS\_CTLA4\_KO\_CD4\_TCELL\_D4\_POST\_IMMUNIZATION\_UP, GSE37563\_WT\_VS\_CTLA4\_KO\_CD4\_TCELL\_D4\_POST\_IMMUNIZATION\_UP GSE22935\_24H\_VS\_48H\_MBOVIS\_BCG\_STIM\_MACROPHAGE\_UP, GSE22935\_24H\_VS\_48H\_MBOVIS\_BCG\_STIM\_MACROPHAGE\_UP REACTOME\_E3\_UBIQUITIN\_LIGASES\_UBIQUITINATE\_TARGET\_PROTEINS, REACTOME\_E3\_UBIQUITIN\_LIGASES\_UBIQUITINATE\_TARGET\_PROTEINS MIR216B\_3P, MIR216B\_3P MIR378A\_5P, MIR378A\_5P GSE9946\_IMMATURE\_VS\_MATURE\_STIMULATORY\_DC\_UP, GSE9946\_IMMATURE\_VS\_MATURE\_STIMULATORY\_DC\_UP MIR6512\_5P, MIR6512\_5P MIR4286, MIR4286 GSE22342\_CD11C\_HIGH\_VS\_LOW\_DECIDUAL\_MACROPHAGES\_UP, GSE22342\_CD11C\_HIGH\_VS\_LOW\_DECIDUAL\_MACROPHAGES\_UP MIR3154, MIR3154 GGTGAAG\_MIR412, GGTGAAG\_MIR412 MIR4299, MIR4299 AGGTGCA\_MIR500, AGGTGCA\_MIR500 MIR501\_3P\_MIR502\_3P, MIR501\_3P\_MIR502\_3P MIR3132, MIR3132 GSE29618\_PRE\_VS\_DAY7\_POST\_LAIV\_FLU\_VACCINE\_MDC\_UP, GSE29618\_PRE\_VS\_DAY7\_POST\_LAIV\_FLU\_VACCINE\_MDC\_UP MIR6854 5P, MIR6854 5P MIR7976, MIR7976 GSE34156\_TLR1\_TLR2\_LIGAND\_VS\_NOD2\_AND\_TLR1\_TLR2\_LIGAND\_6H\_TREATED\_MONOCYTE\_UP, GSE34156\_TLR1\_TLR2\_LIGAND\_VS\_NOD2\_AND\_TLR1\_TLR2\_LIGAND\_6H\_T GSE2585 CTEC VS THYMIC DC UP, GSE2585 CTEC VS THYMIC DC UP MIR649, MIR649 GAVIN\_FOXP3\_TARGETS\_CLUSTER\_P2, GAVIN\_FOXP3\_TARGETS\_CLUSTER\_P2 WP\_STRUCTURAL\_PATHWAY\_OF\_INTERLEUKIN\_1\_IL1, WP\_STRUCTURAL\_PATHWAY\_OF\_INTERLEUKIN\_1\_IL1 ACCTGTTG\_UNKNOWN, ACCTGTTG\_UNKNOWN MIR504\_5P, MIR504\_5P MIR6165, MIR6165 HP\_POSTERIOR\_EMBRYOTOXON, HP\_POSTERIOR\_EMBRYOTOXON MIR874 3P, MIR874 3P GOMF\_UBIQUITIN\_LIKE\_PROTEIN\_CONJUGATING\_ENZYME\_BINDING, GOMF\_UBIQUITIN\_LIKE\_PROTEIN\_CONJUGATING\_ENZYME\_BINDING MIR3144\_3P, MIR3144\_3P GOBP\_LEUKOCYTE\_HOMEOSTASIS, GOBP\_LEUKOCYTE\_HOMEOSTASIS GOMF\_ATPASE\_COUPLED\_INTRAMEMBRANE\_LIPID\_TRANSPORTER\_ACTIVITY, GOMF\_ATPASE\_COUPLED\_INTRAMEMBRANE\_LIPID\_TRANSPORTER\_ACTIVITY MIR3691\_3P, MIR3691\_3P NIKOLSKY\_MUTATED\_AND\_AMPLIFIED\_IN\_BREAST\_CANCER, NIKOLSKY\_MUTATED\_AND\_AMPLIFIED\_IN\_BREAST\_CANCER STARK\_HYPPOCAMPUS\_22Q11\_DELETION\_UP, STARK\_HYPPOCAMPUS\_22Q11\_DELETION\_UP MIR1289, MIR1289 WP\_INTERACTOME\_OF\_POLYCOMB\_REPRESSIVE\_COMPLEX\_2\_PRC2, WP\_INTERACTOME\_OF\_POLYCOMB\_REPRESSIVE\_COMPLEX\_2\_PRC2 HP\_BLUE\_SCLERAE, HP\_BLUE\_SCLERAE MIR4501, MIR4501 DESCARTES\_MAIN\_FETAL\_TROPHOBLAST\_GIANT\_CELLS, DESCARTES\_MAIN\_FETAL\_TROPHOBLAST\_GIANT\_CELLS GOBP\_POST\_EMBRYONIC\_DEVELOPMENT, GOBP\_POST\_EMBRYONIC\_DEVELOPMENT GOBP\_LYMPHOCYTE\_MIGRATION, GOBP\_LYMPHOCYTE\_MIGRATION HP\_CRANIOFACIAL\_HYPEROSTOSIS, HP\_CRANIOFACIAL\_HYPEROSTOSIS GOBP\_PROTEIN\_MONO\_ADP\_RIBOSYLATION, GOBP\_PROTEIN\_MONO\_ADP\_RIBOSYLATION HP\_RETINAL\_VASCULAR\_TORTUOSITY, HP\_RETINAL\_VASCULAR\_TORTUOSITY MIR325, MIR325 MIR218\_2\_3P, MIR218\_2\_3P MARIADASON\_REGULATED\_BY\_HISTONE\_ACETYLATION\_DN, MARIADASON\_REGULATED\_BY\_HISTONE\_ACETYLATION\_DN GOBP\_SYNAPTIC\_TRANSMISSION\_CHOLINERGIC, GOBP\_SYNAPTIC\_TRANSMISSION\_CHOLINERGIC

ANDERSON\_BLOOD\_CN54GP140\_ADJUVANTED\_WITH\_GLA\_AF\_AGE\_18\_45YO\_6HR\_UP, ANDERSON\_BLOOD\_CN54GP140\_ADJUVANTED\_WITH\_GLA\_AF\_AGE\_18\_45YO\_6HR\_UP

GOMF\_CARBOHYDRATE\_PHOSPHATASE\_ACTIVITY, GOMF\_CARBOHYDRATE\_PHOSPHATASE\_ACTIVITY

GOBP\_AMINO\_ACID\_TRANSMEMBRANE\_TRANSPORT, GOBP\_AMINO\_ACID\_TRANSMEMBRANE\_TRANSPORT

REACTOME\_MAP3K8\_TPL2\_DEPENDENT\_MAPK1\_3\_ACTIVATION, REACTOME\_MAP3K8\_TPL2\_DEPENDENT\_MAPK1\_3\_ACTIVATION

GOBP PHENOL CONTAINING\_COMPOUND\_METABOLIC\_PROCESS, GOBP\_PHENOL\_CONTAINING\_COMPOUND\_METABOLIC\_PROCESS

HP\_MULTIFOCAL\_CEREBRAL\_WHITE\_MATTER\_ABNORMALITIES, HP\_MULTIFOCAL\_CEREBRAL\_WHITE\_MATTER\_ABNORMALITIES

GOMF INTRAMEMBRANE LIPID TRANSPORTER ACTIVITY, GOMF INTRAMEMBRANE LIPID TRANSPORTER ACTIVITY

REACTOME\_TRAF6\_MEDIATED\_NF\_KB\_ACTIVATION, REACTOME\_TRAF6\_MEDIATED\_NF\_KB\_ACTIVATION

GOMF\_SPHINGOLIPID\_TRANSPORTER\_ACTIVITY, GOMF\_SPHINGOLIPID\_TRANSPORTER\_ACTIVITY

ZHENG\_FOXP3\_TARGETS\_UP, ZHENG\_FOXP3\_TARGETS\_UP

GOBP\_B\_CELL\_HOMEOSTASIS, GOBP\_B\_CELL\_HOMEOSTASIS

GOCC\_PRC1\_COMPLEX, GOCC\_PRC1\_COMPLEX

ACAWYAAAG\_UNKNOWN, ACAWYAAAG\_UNKNOWN

HP\_BELL\_SHAPED\_THORAX, HP\_BELL\_SHAPED\_THORAX PID\_CDC42\_REG\_PATHWAY, PID\_CDC42\_REG\_PATHWAY

MIR8081, MIR8081

MIR6082, MIR6082

MIR4268, MIR4268

GOBP\_LYMPHOCYTE\_HOMEOSTASIS, GOBP\_LYMPHOCYTE\_HOMEOSTASIS

GOMF\_LIPASE\_INHIBITOR\_ACTIVITY, GOMF\_LIPASE\_INHIBITOR\_ACTIVITY

GOBP\_LOCOMOTORY\_BEHAVIOR, GOBP\_LOCOMOTORY\_BEHAVIOR

GOMF\_LYSOPHOSPHOLIPASE\_ACTIVITY, GOMF\_LYSOPHOSPHOLIPASE\_ACTIVITY

## S\_LISTERIA\_IND\_EFF\_CD4\_TCELL\_UP, GSE10094\_LCMV\_VS\_LISTERIA\_IND\_EFF\_CD4\_TCELL\_UP