```
GSE7852_LN_VS_FAT_TREG_UP, GSE7852_LN_VS_FAT_TREG_UP
 GSE8921_3H_VS_24H_TLR1_2_STIM_MONOCYTE_UP, GSE8921_3H_VS_24H_TLR1_2_STIM_MONOCYTE_UP
 GSE7852_LN_VS_FAT_TCONV_UP, GSE7852_LN_VS_FAT_TCONV_UP
GSE7852_LN_VS_THYMUS_TREG_DN, GSE7852_LN_VS_THYMUS_TREG_DN
 GSE7852_TREG_VS_TCONV_FAT_DN, GSE7852_TREG_VS_TCONV_FAT_DN
GSE7852_THYMUS_VS_FAT_TCONV_UP, GSE7852_THYMUS_VS_FAT_TCONV_UP
MIR4778_5P, MIR4778_5P
GSE19941_UNSTIM_VS_LPS_STIM_IL10_KO_MACROPHAGE_DN, GSE19941_UNSTIM_VS_LPS_STIM_IL10_KO_MACROPHAGE_DN
GSE40666_NAIVE_VS_EFFECTOR_CD8_TCELL_UP, GSE40666_NAIVE_VS_EFFECTOR_CD8_TCELL_UP
GSE37301_CD4_TCELL_VS_GRANULOCYTE_MONOCYTE_PROGENITOR_DN, GSE37301_CD4_TCELL_VS_GRANULOCYTE_MONOCYTE_PROGENITOR_DN
GSE36078_WT_VS_IL1R_KO_LUNG_DC_AFTER_AD5_INF_DN, GSE36078_WT_VS_IL1R_KO_LUNG_DC_AFTER_AD5_INF_DN
GSE21670_TGFB_VS_TGFB_AND_IL6_TREATED_STAT3_KO_CD4_TCELL_UP, GSE21670_TGFB_VS_TGFB_AND_IL6_TREATED_STAT3_KO_CD4_TCELL_UP
MEK UP.V1 DN, MEK UP.V1 DN
GSE2128_C57BL6_VS_NOD_CD4CD8_DP_THYMOCYTE_DN, GSE2128_C57BL6_VS_NOD_CD4CD8_DP_THYMOCYTE_DN
GSE22611_UNSTIM_VS_6H_MDP_STIM_NOD2_TRANSDUCED_HEK293T_CELL_DN, GSE22611_UNSTIM_VS_6H_MDP_STIM_NOD2_TRANSDUCED_HEK293T_CELL_DN
GSE20366_CD103_KLRG1_DP_VS_DN_TREG_UP, GSE20366_CD103_KLRG1_DP_VS_DN_TREG_UP
GSE15330_HSC_VS_MEGAKARYOCYTE_ERYTHROID_PROGENITOR_DN, GSE15330_HSC_VS_MEGAKARYOCYTE_ERYTHROID_PROGENITOR_DN
GSE14415_FOXP3_KO_NATURAL_TREG_VS_TCONV_DN, GSE14415_FOXP3_KO_NATURAL_TREG_VS_TCONV_DN
GSE40274_FOXP3_VS_FOXP3_AND_XBP1_TRANSDUCED_ACTIVATED_CD4_TCELL_DN, GSE40274_FOXP3_VS_FOXP3_AND_XBP1_TRANSDUCED_ACTIVATED_CD4_TCELL_DN
GSE2935_UV_INACTIVATED_VS_LIVE_SENDAI_VIRUS_INF_MACROPHAGE_UP, GSE2935_UV_INACTIVATED_VS_LIVE_SENDAI_VIRUS_INF_MACROPHAGE_UP
GSE21063_CTRL_VS_ANTI_IGM_STIM_BCELL_3H_UP, GSE21063_CTRL_VS_ANTI_IGM_STIM_BCELL_3H_UP
GSE2770_TGFB_AND_IL4_VS_IL12_TREATED_ACT_CD4_TCELL_2H_UP, GSE2770_TGFB_AND_IL4_VS_IL12_TREATED_ACT_CD4_TCELL_2H_UP
MIR6831_5P, MIR6831_5P
GSE14415_ACT_TCONV_VS_ACT_NATURAL_TREG_UP, GSE14415_ACT_TCONV_VS_ACT_NATURAL_TREG_UP
GSE22935_24H_VS_48H_MBOVIS_BCG_STIM_MACROPHAGE_UP, GSE22935_24H_VS_48H_MBOVIS_BCG_STIM_MACROPHAGE_UP
KEGG PROSTATE CANCER, KEGG PROSTATE CANCER
GOBP_REGULATION_OF_MITOCHONDRIAL_MEMBRANE_POTENTIAL, GOBP_REGULATION_OF_MITOCHONDRIAL_MEMBRANE_POTENTIAL
 GSE39820_IL1B_IL6_VS_IL1B_IL6_IL23A_TREATED_CD4_TCELL_UP, GSE39820_IL1B_IL6_VS_IL1B_IL6_IL23A_TREATED_CD4_TCELL_UP
 DESCARTES FETAL MUSCLE LYMPHOID CELLS, DESCARTES FETAL MUSCLE LYMPHOID CELLS
 MIR504_5P, MIR504_5P
 MIR4463, MIR4463
 MIR4725 5P, MIR4725 5P
 GUTIERREZ_CHRONIC_LYMPHOCYTIC_LEUKEMIA_DN, GUTIERREZ_CHRONIC_LYMPHOCYTIC_LEUKEMIA_DN
 VANASSE_BCL2_TARGETS_DN, VANASSE_BCL2_TARGETS_DN
 YRTCANNRCGC_UNKNOWN, YRTCANNRCGC_UNKNOWN
 BOSCO_TH1_CYTOTOXIC_MODULE, BOSCO_TH1_CYTOTOXIC_MODULE
 MIR2116_3P, MIR2116_3P
 MIR10524_5P, MIR10524_5P
 MEIS1AHOXA9_01, MEIS1AHOXA9_01
 GOBP_THYMUS_DEVELOPMENT, GOBP_THYMUS_DEVELOPMENT
 GOCC SWR1 COMPLEX, GOCC SWR1 COMPLEX
 DESCARTES_MAIN_FETAL_THYMOCYTES, DESCARTES_MAIN_FETAL_THYMOCYTES
 GOLUB_ALL_VS_AML_UP, GOLUB_ALL_VS_AML_UP
 HP LARGE BASAL GANGLIA, HP LARGE BASAL GANGLIA
 TENEDINI MEGAKARYOCYTE MARKERS, TENEDINI MEGAKARYOCYTE MARKERS
GOBP_REGULATION_OF_TRANSCRIPTION_BY_RNA_POLYMERASE_III, GOBP_REGULATION_OF_TRANSCRIPTION_BY_RNA_POLYMERASE_III
 MIR549A_5P, MIR549A_5P
GSE2128_C57BL6_VS_NOD_THYMOCYTE_MIMETOPE_NEGATIVE_SELECTION_UP, GSE2128_C57BL6_VS_NOD_THYMOCYTE_MIMETOPE_NEGATIVE_SELECTION_UP
MORF EPHA7, MORF EPHA7
 BILBAN_B_CLL_LPL_UP, BILBAN_B_CLL_LPL_UP
 HP_BONE_PAIN, HP_BONE_PAIN
 DESCARTES FETAL MUSCLE LYMPHATIC ENDOTHELIAL CELLS, DESCARTES FETAL MUSCLE LYMPHATIC ENDOTHELIAL CELLS
 KEGG_SULFUR_METABOLISM, KEGG_SULFUR_METABOLISM
 HP MYELOPROLIFERATIVE DISORDER, HP MYELOPROLIFERATIVE DISORDER
 chr4q25, chr4q25
 BIOCARTA_NUCLEARRS_PATHWAY, BIOCARTA_NUCLEARRS_PATHWAY
 HP_WEAKNESS_OF_THE_INTRINSIC_HAND_MUSCLES, HP_WEAKNESS_OF_THE_INTRINSIC_HAND_MUSCLES
 HP_MILDLY_ELEVATED_CREATINE_KINASE, HP_MILDLY_ELEVATED_CREATINE_KINASE
 GOBP_CYTOPLASMIC_TRANSLATIONAL_ELONGATION, GOBP_CYTOPLASMIC_TRANSLATIONAL_ELONGATION
 GOBP_POSITIVE_REGULATION_OF_MITOCHONDRIAL_MEMBRANE_POTENTIAL, GOBP_POSITIVE_REGULATION_OF_MITOCHONDRIAL_MEMBRANE_POTENTIAL
 GOBP_POSITIVE_REGULATION_OF_MEMBRANE_POTENTIAL, GOBP_POSITIVE_REGULATION_OF_MEMBRANE_POTENTIAL
 GOCC_OLIGOSACCHARYLTRANSFERASE_COMPLEX, GOCC_OLIGOSACCHARYLTRANSFERASE_COMPLEX
 HP_AGYRIA, HP_AGYRIA
 GOBP_POSITIVE_REGULATION_OF_MULTICELLULAR_ORGANISM_GROWTH, GOBP_POSITIVE_REGULATION_OF_MULTICELLULAR_ORGANISM_GROWTH
 GREENBAUM_E2A_TARGETS_DN, GREENBAUM_E2A_TARGETS_DN
 GOBP_LATERAL_SPROUTING_FROM_AN_EPITHELIUM, GOBP_LATERAL_SPROUTING_FROM_AN_EPITHELIUM
 GOBP_SIALYLATION, GOBP_SIALYLATION
WP_NUCLEAR_RECEPTORS_IN_LIPID_METABOLISM_AND_TOXICITY, WP_NUCLEAR_RECEPTORS_IN_LIPID_METABOLISM_AND_TOXICITY
GOMF_SIALYLTRANSFERASE_ACTIVITY, GOMF_SIALYLTRANSFERASE_ACTIVITY
chr6q22, chr6q22
REACTOME_ABC_TRANSPORTERS_IN_LIPID_HOMEOSTASIS, REACTOME_ABC_TRANSPORTERS_IN_LIPID_HOMEOSTASIS
MIR551A_MIR551B_3P, MIR551A_MIR551B_3P
chr12q12, chr12q12
REACTOME_HDL_REMODELING, REACTOME_HDL_REMODELING
HP_HYPOPLASIA_OF_THE_IRIS, HP_HYPOPLASIA_OF_THE_IRIS
WEINBERGER_BLOOD_TWINRIX_AGE_20_40_AND_60_84YO_CORRELATED_WITH_HIGH_ANTI_HBS_CONC_AT_WEEK_4_POST_BOOSTER_VACC_1DY_POSITIVE, WEINBERGER_BLOOD_TWINRIX_AGE_20_40_AND_60_84YO_CORRELATED_WITH_HIGH_ANTI_HBS_CONC_AT_WEEK_4_POST_BOOSTER_AT_WEEK_4_POST_BOOSTER_AT_WITH_HIGH_ANTI_HBS_CONC_AT_WITH_HIGH_ANTI_HBS_CONC_AT_WITH_HIGH_ANTI_HBS_CONC_AT_WITH_HIGH_ANTI_HBS_CONC_AT_WITH_HIGH_ANTI_HBS_CONC_AT_WITH_HIGH_ANTI_HBS_CONC_AT_WITH_HIGH_ANTI_HBS_CONC_AT_WITH_HIGH_ANTI_HBS_CONC_AT_WITH_HIGH_ANTI_HBS_CONC_AT_WITH_HIGH_ANTI_HBS_CONC_AT_WITH_HIGH_ANTI_HBS_CONC_AT_WITH_HIGH_ANTI_HBS_CONC_AT_WITH_HIGH_ANTI_HBS_CONC_AT_WITH_HIGH_ANTI_HBS_CONC_AT_WITH_HIGH_ANTI_HBS_CONC_AT_WITH_HIGH_ANTI_HBS_CON
GOBP_LACRIMAL_GLAND_DEVELOPMENT, GOBP_LACRIMAL_GLAND_DEVELOPMENT
GOBP_PURINE_DEOXYRIBONUCLEOSIDE_MONOPHOSPHATE_METABOLIC_PROCESS, GOBP_PURINE_DEOXYRIBONUCLEOSIDE_MONOPHOSPHATE_METABOLIC_PROCESS
GOBP_NEGATIVE_REGULATION_OF_DENDRITIC_CELL_APOPTOTIC_PROCESS, GOBP_NEGATIVE_REGULATION_OF_DENDRITIC_CELL_APOPTOTIC_PROCESS
HP_NARROW_FORAMEN_OBTURATORIUM, HP_NARROW_FORAMEN_OBTURATORIUM
GOMF_OLFACTORY_RECEPTOR_BINDING, GOMF_OLFACTORY_RECEPTOR_BINDING
GOBP_SENSORY_PERCEPTION_OF_TASTE, GOBP_SENSORY_PERCEPTION_OF_TASTE
GOMF_LIPASE_INHIBITOR_ACTIVITY, GOMF_LIPASE_INHIBITOR_ACTIVITY
HP_LACRIMAL_DUCT_ATRESIA, HP_LACRIMAL_DUCT_ATRESIA
ANDERSON_BLOOD_CN54GP140_ADJUVANTED_WITH_GLA_AF_AGE_18_45YO_LOW_IGM_RESPONDERS_6HY_1DY_UP, ANDERSON_BLOOD_CN54GP140_ADJUVANTED_WITH_GLA_AF_AGE_18_45YO_LOW_IGM_RESPONDERS_6HY_1DY_UP
chr5q14, chr5q14
chr4p12, chr4p12
 GOBP_THYMOCYTE_MIGRATION, GOBP_THYMOCYTE_MIGRATION
 GOMF_ALPHA_N_ACETYLNEURAMINATE_ALPHA_2_8_SIALYLTRANSFERASE_ACTIVITY, GOMF_ALPHA_N_ACETYLNEURAMINATE_ALPHA_2_8_SIALYLTRANSFERASE_ACTIVITY
GOMF_LIPASE_BINDING, GOMF_LIPASE_BINDING
GOBP_POSITIVE_REGULATION_OF_PROTEIN_DEUBIQUITINATION, GOBP_POSITIVE_REGULATION_OF_PROTEIN_DEUBIQUITINATION
GOBP_NEGATIVE_REGULATION_OF_CHOLESTEROL_STORAGE, GOBP_NEGATIVE_REGULATION_OF_CHOLESTEROL_STORAGE
GOBP_POSITIVE_REGULATION_OF_HYPERSENSITIVITY, GOBP_POSITIVE_REGULATION_OF_HYPERSENSITIVITY
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GOBP\_REGULATION\_OF\_HYPERSENSITIVITY, GOBP\_REGULATION\_OF\_HYPERSENSITIVITY

HP INCREASED SKULL OSSIFICATION, HP INCREASED SKULL OSSIFICATION