```
GSE34515_CD16_POS_MONOCYTE_VS_DC_DN, GSE34515_CD16_POS_MONOCYTE_VS_DC_DN
 GSE24210_RESTING_TREG_VS_TCONV_UP, GSE24210_RESTING_TREG_VS_TCONV_UP
 GSE32986_CURDLAN_LOWDOSE_VS_CURDLAN_HIGHDOSE_STIM_DC_UP, GSE32986_CURDLAN_LOWDOSE_VS_CURDLAN_HIGHDOSE_STIM_DC_UP
 GSE5589_UNSTIM_VS_45MIN_LPS_AND_IL6_STIM_MACROPHAGE_UP, GSE5589_UNSTIM_VS_45MIN_LPS_AND_IL6_STIM_MACROPHAGE_UP
 GSE41867_LCMV_ARMSTRONG_VS_CLONE13_DAY8_EFFECTOR_CD8_TCELL_UP, GSE41867_LCMV_ARMSTRONG_VS_CLONE13_DAY8_EFFECTOR_CD8_TCELL_UP
 GSE17322_CD103_POS_VS_CD11B_HIGH_LUNG_DC_UP, GSE17322_CD103_POS_VS_CD11B_HIGH_LUNG_DC_UP
 GSE5589 IL6 KO VS IL10 KO LPS STIM MACROPHAGE 45MIN UP, GSE5589 IL6 KO VS IL10 KO LPS STIM MACROPHAGE 45MIN UP
 GSE16697_CD4_TCELL_VS_TFH_CD4_TCELL_UP, GSE16697_CD4_TCELL_VS_TFH_CD4_TCELL_UP
 GSE5589_WT_VS_IL10_KO_LPS_AND_IL10_STIM_MACROPHAGE_45MIN_UP, GSE5589_WT_VS_IL10_KO_LPS_AND_IL10_STIM_MACROPHAGE_45MIN_UP
 GSE24292_WT_VS_PPARG_KO_MACROPHAGE_DN, GSE24292_WT_VS_PPARG_KO_MACROPHAGE_DN
 GSE5589_LPS_VS_LPS_AND_IL6_STIM_MACROPHAGE_45MIN_UP, GSE5589_LPS_VS_LPS_AND_IL6_STIM_MACROPHAGE_45MIN_UP
GSE6674 ANTI IGM VS ANTI IGM AND CPG STIM BCELL UP, GSE6674 ANTI IGM VS ANTI IGM AND CPG STIM BCELL UP
 GSE17186_BLOOD_VS_CORD_BLOOD_CD21LOW_TRANSITIONAL_BCELL_DN, GSE17186_BLOOD_VS_CORD_BLOOD_CD21LOW_TRANSITIONAL_BCELL_DN
 GSE17186_BLOOD_VS_CORD_BLOOD_NAIVE_BCELL_DN, GSE17186_BLOOD_VS_CORD_BLOOD_NAIVE_BCELL_DN
GSE34006_A2AR_KO_VS_A2AR_AGONIST_TREATED_TREG_UP, GSE34006_A2AR_KO_VS_A2AR_AGONIST_TREATED_TREG_UP
GSE12392_WT_VS_IFNAR_KO_CD8A_NEG_SPLEEN_DC_UP, GSE12392_WT_VS_IFNAR_KO_CD8A_NEG_SPLEEN_DC_UP
GSE18893_CTRL_VS_TNF_TREATED_TREG_24H_DN, GSE18893_CTRL_VS_TNF_TREATED_TREG_24H_DN
GSE5589_UNSTIM_VS_180MIN_LPS_AND_IL10_STIM_MACROPHAGE_DN, GSE5589_UNSTIM_VS_180MIN_LPS_AND_IL10_STIM_MACROPHAGE_DN
GSE28237_EARLY_VS_LATE_GC_BCELL_DN, GSE28237_EARLY_VS_LATE_GC_BCELL_DN
GSE32986_GMCSF_VS_GMCSF_AND_CURDLAN_HIGHDOSE_STIM_DC_UP, GSE32986_GMCSF_VS_GMCSF_AND_CURDLAN_HIGHDOSE_STIM_DC_UP
GSE36009_WT_VS_NLRP10_KO_DC_LPS_STIM_UP, GSE36009_WT_VS_NLRP10_KO_DC_LPS_STIM_UP
GSE42724_NAIVE_BCELL_VS_PLASMABLAST_UP, GSE42724_NAIVE_BCELL_VS_PLASMABLAST_UP
GSE5589_WT_VS_IL6_KO_LPS_STIM_MACROPHAGE_45MIN_UP, GSE5589_WT_VS_IL6_KO_LPS_STIM_MACROPHAGE_45MIN_UP
GSE24142_ADULT_VS_FETAL_DN2_THYMOCYTE_UP, GSE24142_ADULT_VS_FETAL_DN2_THYMOCYTE_UP
GSE29164_UNTREATED_VS_CD8_TCELL_TREATED_MELANOMA_DAY3_DN, GSE29164_UNTREATED_VS_CD8_TCELL_TREATED_MELANOMA_DAY3_DN
GSE24142_ADULT_VS_FETAL_DN3_THYMOCYTE_UP, GSE24142_ADULT_VS_FETAL_DN3_THYMOCYTE_UP
GSE7460_CTRL_VS_TGFB_TREATED_ACT_FOXP3_HET_TCONV_DN, GSE7460_CTRL_VS_TGFB_TREATED_ACT_FOXP3_HET_TCONV_DN
GSE40274 GATA1_VS_FOXP3_AND_GATA1_TRANSDUCED_ACTIVATED_CD4_TCELL_UP, GSE40274_GATA1_VS_FOXP3_AND_GATA1_TRANSDUCED_ACTIVATED_CD4_T
GSE17721_0.5H_VS_8H_LPS_BMDC_DN, GSE17721_0.5H_VS_8H_LPS_BMDC_DN
GSE17721_POLYIC_VS_GARDIQUIMOD_6H_BMDC_UP, GSE17721_POLYIC_VS_GARDIQUIMOD_6H_BMDC_UP
GSE4590_LARGE_PRE_BCELL_VS_VPREB_POS_LARGE_PRE_BCELL_UP, GSE4590_LARGE_PRE_BCELL_VS_VPREB_POS_LARGE_PRE_BCELL_UP
GSE5589_LPS_VS_LPS_AND_IL6_STIM_IL6_KO_MACROPHAGE_45MIN_UP, GSE5589_LPS_VS_LPS_AND_IL6_STIM_IL6_KO_MACROPHAGE_45MIN_UP
GSE3039_NKT_CELL_VS_B2_BCELL_UP, GSE3039_NKT_CELL_VS_B2_BCELL_UP
GSE42021_CD24HI_VS_CD24LOW_TREG_THYMUS_DN, GSE42021_CD24HI_VS_CD24LOW_TREG_THYMUS_DN
 GSE23505_UNTREATED_VS_4DAY_IL6_IL1_IL23_TREATED_CD4_TCELL_DN, GSE23505_UNTREATED_VS_4DAY_IL6_IL1_IL23_TREATED_CD4_TCELL_DN
GSE17721_POLYIC_VS_CPG_16H_BMDC_UP, GSE17721_POLYIC_VS_CPG_16H_BMDC_UP
GSE40274_CTRL_VS_GATA1_TRANSDUCED_ACTIVATED_CD4_TCELL_UP, GSE40274_CTRL_VS_GATA1_TRANSDUCED_ACTIVATED_CD4_TCELL_UP
GSE36527_CD69_NEG_VS_POS_TREG_CD62L_LOS_KLRG1_NEG_UP, GSE36527_CD69_NEG_VS_POS_TREG_CD62L_LOS_KLRG1_NEG_UP
GSE26030_TH1_VS_TH17_DAY5_POST_POLARIZATION_UP, GSE26030_TH1_VS_TH17_DAY5_POST_POLARIZATION_UP
GSE29164 UNTREATED VS CD8 TCELL AND IL12 TREATED MELANOMA DAY3 UP, GSE29164 UNTREATED VS CD8 TCELL AND IL12 TREATED MELANOMA DAY
GSE42021_TREG_PLN_VS_CD24LO_TREG_THYMUS_DN, GSE42021_TREG_PLN_VS_CD24LO_TREG_THYMUS_DN
GSE11961_MARGINAL_ZONE_BCELL_VS_MEMORY_BCELL_DAY40_UP, GSE11961_MARGINAL_ZONE_BCELL_VS_MEMORY_BCELL_DAY40_UP
 GSE20366_TREG_VS_TCONV_DN, GSE20366_TREG_VS_TCONV_DN
 GSE21927_UNTREATED_VS_GMCSF_GCSF_TREATED_BONE_MARROW_DN, GSE21927_UNTREATED_VS_GMCSF_GCSF_TREATED_BONE_MARROW_DN
HALLMARK INTERFERON ALPHA RESPONSE, HALLMARK INTERFERON ALPHA RESPONSE
GSE5589_LPS_AND_IL10_VS_LPS_AND_IL6_STIM_IL10_KO_MACROPHAGE_45MIN_UP, GSE5589_LPS_AND_IL10_VS_LPS_AND_IL10_KO_MACROPHAGE_45MIN_UP, GSE5589_LPS_AND_IL10_VS_LPS_AND_IL10_KO_MACROPHAGE_45MIN_UP, GSE5589_LPS_AND_IL10_VS_LPS_AND_IL10_KO_MACROPHAGE_45MIN_UP, GSE5589_LPS_AND_IL10_VS_LPS_AND_IL10_KO_MACROPHAGE_45MIN_UP, GSE5589_LPS_AND_IL10_VS_LPS_AND_IL10_KO_MACROPHAGE_45MIN_UP, GSE5589_LPS_AND_IL10_VS_LPS_AND_IL10_KO_MACROPHAGE_45MIN_UP, GSE5589_LPS_AND_IL10_VS_LPS_AND_IL10_KO_MACROPHAGE_45MIN_UP, GSE5589_LPS_AND_IL10_VS_LPS_AND_IL10_KO_MACROPHAGE_45MIN_UP, GSE5589_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LPS_AND_IL10_VS_LP
 GSE42021_CD24INT_VS_CD24LOW_TREG_THYMUS_DN, GSE42021_CD24INT_VS_CD24LOW_TREG_THYMUS_DN
 HP_ABNORMALITY_OF_LATERAL_VENTRICLE, HP_ABNORMALITY_OF_LATERAL_VENTRICLE
 GSE7831_1H_VS_4H_INFLUENZA_STIM_PDC_DN, GSE7831_1H_VS_4H_INFLUENZA_STIM_PDC_DN
 GSE18791_UNSTIM_VS_NEWCATSLE_VIRUS_DC_18H_DN, GSE18791_UNSTIM_VS_NEWCATSLE_VIRUS_DC_18H_DN
 MIR4690_3P, MIR4690_3P
 GSE34179_THPOK_KO_VS_WT_VA14I_NKTCELL_UP, GSE34179_THPOK_KO_VS_WT_VA14I_NKTCELL_UP
 MIR5685, MIR5685
 MIR4445_5P, MIR4445_5P
 MIR362_3P, MIR362_3P
 GSE30971_2H_VS_4H_LPS_STIM_MACROPHAGE_WBP7_KO_UP, GSE30971_2H_VS_4H_LPS_STIM_MACROPHAGE_WBP7_KO_UP
 SIMBULAN_UV_RESPONSE_NORMAL_DN, SIMBULAN_UV_RESPONSE_NORMAL_DN
 NADLER_OBESITY_UP, NADLER_OBESITY_UP
 MIR6793_3P, MIR6793_3P
 MODULE_493, MODULE_493
 HP_HYPOPLASIA_OF_TEETH, HP_HYPOPLASIA_OF_TEETH
 GENTILE_UV_RESPONSE_CLUSTER_D2, GENTILE_UV_RESPONSE_CLUSTER_D2
GOBP_NEGATIVE_REGULATION_OF_TYPE_I_INTERFERON_PRODUCTION, GOBP_NEGATIVE_REGULATION_OF_TYPE_I_INTERFERON_PRODUCTION
GOBP_PLACENTA_DEVELOPMENT, GOBP_PLACENTA_DEVELOPMENT
GOMF_CHANNEL_REGULATOR_ACTIVITY, GOMF_CHANNEL_REGULATOR_ACTIVITY
 GSE22025_UNTREATED_VS_TGFB1_TREATED_CD4_TCELL_DN, GSE22025_UNTREATED_VS_TGFB1_TREATED_CD4_TCELL_DN
 WP_G_PROTEIN_SIGNALING_PATHWAYS, WP_G_PROTEIN_SIGNALING_PATHWAYS
 WP_CALCIUM_REGULATION_IN_THE_CARDIAC_CELL, WP_CALCIUM_REGULATION_IN_THE_CARDIAC_CELL
 RADAEVA_RESPONSE_TO_IFNA1_UP, RADAEVA_RESPONSE_TO_IFNA1_UP
 GSE29164_UNTREATED_VS_CD8_TCELL_TREATED_MELANOMA_DAY7_DN, GSE29164_UNTREATED_VS_CD8_TCELL_TREATED_MELANOMA_DAY7_DN
 AR_01, AR_01
 HP_CARIOUS_TEETH, HP_CARIOUS_TEETH
 GOBP_POSITIVE_REGULATION_OF_CALCIUM_ION_TRANSPORT, GOBP_POSITIVE_REGULATION_OF_CALCIUM_ION_TRANSPORT
 PRMT5_TARGET_GENES, PRMT5_TARGET_GENES
 GOBP_PIGMENT_GRANULE_ORGANIZATION, GOBP_PIGMENT_GRANULE_ORGANIZATION
 GCTGAGT_MIR5125P, GCTGAGT_MIR5125P
 PID_THROMBIN_PAR1_PATHWAY, PID_THROMBIN_PAR1_PATHWAY
GNF2_TAL1, GNF2_TAL1
 HP_ABNORMALITY_OF_THE_THYMUS, HP_ABNORMALITY_OF_THE_THYMUS
 GSE2770_IL12_VS_TGFB_AND_IL12_TREATED_ACT_CD4_TCELL_2H_UP, GSE2770_IL12_VS_TGFB_AND_IL12_TREATED_ACT_CD4_TCELL_2H_UP
 BOWIE_RESPONSE_TO_TAMOXIFEN, BOWIE_RESPONSE_TO_TAMOXIFEN
 ZHONG_PFC_C9_ORG_OTHER, ZHONG_PFC_C9_ORG_OTHER
 GSE20715_0H_VS_6H_OZONE_TLR4_KO_LUNG_UP, GSE20715_0H_VS_6H_OZONE_TLR4_KO_LUNG_UP
MOSERLE_IFNA_RESPONSE, MOSERLE_IFNA_RESPONSE
GOBP POSITIVE CHEMOTAXIS, GOBP POSITIVE CHEMOTAXIS
QUEREC_PBMC_YF_17D_VACCINE_AGE_18_45YO_3DY_UP, QUEREC_PBMC_YF_17D_VACCINE_AGE_18_45YO_3DY_UP
QUEREC_PBMC_YF_17D_VACCINE_AGE_18_45YO_7DY_UP, QUEREC_PBMC_YF_17D_VACCINE_AGE_18_45YO_7DY_UP
PID_ECADHERIN_KERATINOCYTE_PATHWAY, PID_ECADHERIN_KERATINOCYTE_PATHWAY
ENGELMANN_CANCER_PROGENITORS_UP, ENGELMANN_CANCER_PROGENITORS_UP
DAUER_STAT3_TARGETS_DN, DAUER_STAT3_TARGETS_DN
HOFFMANN_LARGE_TO_SMALL_PRE_BII_LYMPHOCYTE_DN, HOFFMANN_LARGE_TO_SMALL_PRE_BII_LYMPHOCYTE_DN
YAO_HOXA10_TARGETS_VIA_PROGESTERONE_UP, YAO_HOXA10_TARGETS_VIA_PROGESTERONE_UP
GOBP_POSITIVE_REGULATION_OF_OSSIFICATION, GOBP_POSITIVE_REGULATION_OF_OSSIFICATION
GSE13887_HEALTHY_VS_LUPUS_RESTING_CD4_TCELL_UP, GSE13887_HEALTHY_VS_LUPUS_RESTING_CD4_TCELL_UP
GSE21033 3H VS_12H POLYIC STIM DC_DN, GSE21033 3H VS_12H POLYIC STIM DC_DN
GOCC MULTIVESICULAR BODY, GOCC MULTIVESICULAR BODY
MIR654_5P, MIR654_5P
MIR541_3P, MIR541_3P
PID ERBB2 ERBB3 PATHWAY, PID ERBB2 ERBB3 PATHWAY
MIR7151 5P, MIR7151 5P
GOMF_ION_CHANNEL_REGULATOR_ACTIVITY, GOMF_ION_CHANNEL_REGULATOR_ACTIVITY
GOMF_RNA_POLYMERASE_II_ACTIVATING_TRANSCRIPTION_FACTOR_BINDING, GOMF_RNA_POLYMERASE_II_ACTIVATING_TRANSCRIPTION_FACTOR_BINDING
HP_SKIN_EROSION, HP_SKIN_EROSION
HP_ABSENT_EYEBROW, HP_ABSENT_EYEBROW
GSE19941 IL10 KO VS IL10 KO AND NFKBP50 KO UNSTIM MACROPHAGE UP, GSE19941 IL10 KO VS IL10 KO AND NFKBP50 KO UNSTIM MACROPHAGE UP
WU_HBX_TARGETS_2_DN, WU_HBX_TARGETS_2_DN
GOBP_POSITIVE_REGULATION_OF_CALCIUM_ION_TRANSMEMBRANE_TRANSPORT, GOBP_POSITIVE_REGULATION_OF_CALCIUM_ION_TRANSMEMBRANE_TRANSP
GOBP POSITIVE REGULATION OF EPIDERMIS DEVELOPMENT, GOBP POSITIVE REGULATION OF EPIDERMIS DEVELOPMENT
GOBP_AMINE_CATABOLIC_PROCESS, GOBP_AMINE_CATABOLIC_PROCESS
HP_CORNEAL_SCARRING, HP_CORNEAL_SCARRING
KRASNOSELSKAYA ILF3 TARGETS UP, KRASNOSELSKAYA ILF3 TARGETS UP
GOMF_ORGANIC_CATION_TRANSMEMBRANE_TRANSPORTER_ACTIVITY, GOMF_ORGANIC_CATION_TRANSMEMBRANE_TRANSPORTER_ACTIVITY
GOBP_POSITIVE_REGULATION_OF_COLLAGEN_METABOLIC_PROCESS, GOBP_POSITIVE_REGULATION_OF_COLLAGEN_METABOLIC_PROCESS
GOBP_CALCINEURIN_MEDIATED_SIGNALING, GOBP_CALCINEURIN_MEDIATED_SIGNALING
GOBP_NEGATIVE_REGULATION_OF_SMALL_MOLECULE_METABOLIC_PROCESS, GOBP_NEGATIVE_REGULATION_OF_SMALL_MOLECULE_METABOLIC_PROCESS
GOBP_REGULATION_OF_TRANSCRIPTION_REGULATORY_REGION_DNA_BINDING, GOBP_REGULATION_OF_TRANSCRIPTION_REGULATORY_REGION_DNA_BINDING
GOMF_CYCLIC_NUCLEOTIDE_PHOSPHODIESTERASE_ACTIVITY, GOMF_CYCLIC_NUCLEOTIDE_PHOSPHODIESTERASE_ACTIVITY
ZHANG_ADIPOGENESIS_BY_BMP7, ZHANG_ADIPOGENESIS_BY_BMP7
HP_GRAMMAR_SPECIFIC_SPEECH_DISORDER, HP_GRAMMAR_SPECIFIC_SPEECH_DISORDER
GOBP_PROTEIN_LOCALIZATION_TO_NUCLEOLUS, GOBP_PROTEIN_LOCALIZATION_TO_NUCLEOLUS
 WP_TCELL_ANTIGEN_RECEPTOR_TCR_PATHWAY_DURING_STAPHYLOCOCCUS_AUREUS_INFECTION, WP_TCELL_ANTIGEN_TCR_PATHWAY_DURING_STAPHYLOCOCCUS_AUREUS_INFECTION, WP_TCELL_ANTIGEN_TCR_PATHWAY_DURING_STAPHYLOCOCCUS_AUREUS_AUREUS_TCR_PATHWAY_DURING_STAPHYLOCOCCUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREUS_AUREU
GOBP_NEGATIVE_REGULATION_OF_ESTABLISHMENT_OF_PROTEIN_LOCALIZATION, GOBP_NEGATIVE_REGULATION_OF_ESTABLISHMENT_OF_PROTEIN_LOCALIZATION.
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SHETH\_LIVER\_CANCER\_VS\_TXNIP\_LOSS\_PAM6, SHETH\_LIVER\_CANCER\_VS\_TXNIP\_LOSS\_PAM6

HP\_ABNORMAL\_CHROMOSOME\_MORPHOLOGY, HP\_ABNORMAL\_CHROMOSOME\_MORPHOLOGY

HP\_DECREASED\_SERUM\_COMPLEMENT\_FACTOR\_I, HP\_DECREASED\_SERUM\_COMPLEMENT\_FACTOR\_I

GOBP\_MATERNAL\_PLACENTA\_DEVELOPMENT, GOBP\_MATERNAL\_PLACENTA\_DEVELOPMENT

GOBP\_PIGMENT\_CELL\_DIFFERENTIATION, GOBP\_PIGMENT\_CELL\_DIFFERENTIATION

GOCC\_LAMELLAR\_BODY, GOCC\_LAMELLAR\_BODY

GOBP\_ASTROCYTE\_ACTIVATION, GOBP\_ASTROCYTE\_ACTIVATION

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IL10_STIM_IL6_KO_MACROPHAGE_180MIN_UP, GSE5589_LPS_VS_LPS_AND_IL10_STIM_IL6_KO_MACROPHAGE_180MIN_UP
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