```
GSE25087_TREG_VS_TCONV_ADULT_UP, GSE25087_TREG_VS_TCONV_ADULT_UP
                                                                                                                     GSE1432_1H_VS_24H_IFNG_MICROGLIA_DN, GSE1432_1H_VS_24H_IFNG_MICROGLIA_DN
                                                                                                                     GSE22886_NAIVE_CD8_TCELL_VS_MEMORY_TCELL_DN, GSE22886_NAIVE_CD8_TCELL_VS_MEMORY_TCELL_DN
                                                                                                                     IKEDA_MIR30_TARGETS_UP, IKEDA_MIR30_TARGETS_UP
                                                                                                                     GSE9316_CD4_TCELL_BALBC_VS_TH17_ENRI_CD4_TCELL_SKG_PMA_IONO_STIM_FR4NEG_DN, GSE9316_CD4_TCELL_BALBC_VS_TH17_ENRI_CD4_TCELL_SKG_PMA_IONO_STIM_FR4NEG_DN
                                                                                                                     MIR4504, MIR4504
                                                                                                                     GSE21360_PRIMARY_VS_SECONDARY_MEMORY_CD8_TCELL_UP, GSE21360_PRIMARY_VS_SECONDARY_MEMORY_CD8_TCELL_UP
                                                                                                                     MIR590_5P, MIR590_5P
                                                                                                                     GSE36078_UNTREATED_VS_AD5_T425A_HEXON_INF_MOUSE_LUNG_DC_UP, GSE36078_UNTREATED_VS_AD5_T425A_HEXON_INF_MOUSE_LUNG_DC_UP
                                                                                                                     GCM IL6ST, GCM IL6ST
                                                                                                                     MIR4650 3P, MIR4650 3P
                                                                                                                     GSE29618_PRE_VS_DAY7_POST_LAIV_FLU_VACCINE_BCELL_DN, GSE29618_PRE_VS_DAY7_POST_LAIV_FLU_VACCINE_BCELL_DN
                                                                                                                     GSE26495_PD1HIGH_VS_PD1LOW_CD8_TCELL_UP, GSE26495_PD1HIGH_VS_PD1LOW_CD8_TCELL_UP
                                                                                                                     GSE1791_CTRL_VS_NEUROMEDINU_IN_T_CELL_LINE_3H_UP, GSE1791_CTRL_VS_NEUROMEDINU_IN_T_CELL_LINE_3H_UP
                                                                                                                     MORI_PRE_BI_LYMPHOCYTE_DN, MORI_PRE_BI_LYMPHOCYTE_DN
                                                                                                                     GSE1432_CTRL_VS_IFNG_1H_MICROGLIA_DN, GSE1432_CTRL_VS_IFNG_1H_MICROGLIA_DN
                                                                                                                     HALLMARK_PEROXISOME, HALLMARK_PEROXISOME
                                                                                                                     GOBP_ENDOPLASMIC_RETICULUM_ORGANIZATION, GOBP_ENDOPLASMIC_RETICULUM_ORGANIZATION
                                                                                                                     GSE17721 LPS VS PAM3CSK4 2H BMDC UP, GSE17721 LPS VS PAM3CSK4 2H BMDC UP
                                                                                                                     GSE37301_COMMON_LYMPHOID_PROGENITOR_VS_PRO_BCELL_UP, GSE37301_COMMON_LYMPHOID_PROGENITOR_VS_PRO_BCELL_UP
                                                                                                                     KIM_GERMINAL_CENTER_T_HELPER_UP, KIM_GERMINAL_CENTER_T_HELPER_UP
                                                                                                                     GSE37533_PPARG2_FOXP3_VS_FOXP3_TRANSDUCED_CD4_TCELL_PIOGLITAZONE_TREATED_UP, GSE37533_PPARG2_FOXP3_VS_FOXP3_TRANSDUCED_CD4_TCELL_PIOGLITAZONE_TREATED_UP
                                                                                                                     GOMF_CYTOKINE_BINDING, GOMF_CYTOKINE_BINDING
                                                                                                                     HP_COXA_VALGA, HP_COXA_VALGA
                                                                                                                     MIR6883_3P, MIR6883_3P
                                                                                                                     KUROZUMI RESPONSE TO ONCOCYTIC VIRUS, KUROZUMI RESPONSE TO ONCOCYTIC VIRUS
                                                                                                                     HP_MUSCLE_FIBER_ATROPHY, HP_MUSCLE_FIBER_ATROPHY
                                                                                                                     BMI1_DN.V1_DN, BMI1_DN.V1_DN
                                                                                                                     HP_TACHYCARDIA, HP_TACHYCARDIA
                                                                                                                      GOBP_REGULATION_OF_ENDOPLASMIC_RETICULUM_STRESS_INDUCED_INTRINSIC_APOPTOTIC_SIGNALING_PATHWAY, GOBP_REGULATION_OF_ENDOPLASMIC_RETICULUM_STRESS_INDUCED_INTRINSIC_APOPTOTIC_SIGNALING_PATHWAY.
                                                                                                                      MIR346, MIR346
                                                                                                                      NRL_DN.V1_DN, NRL_DN.V1_DN
                                                                                                                      MIR8081, MIR8081
                                                                                                                      MIR4711_3P, MIR4711_3P
                                                                                                                      PID_ECADHERIN_STABILIZATION_PATHWAY, PID_ECADHERIN_STABILIZATION_PATHWAY
                                                                                                                      DAUER STAT3 TARGETS DN, DAUER STAT3 TARGETS DN
                                                                                                                     PID_ARF6_PATHWAY, PID_ARF6_PATHWAY
                                                                                                                      REACTOME_SMOOTH_MUSCLE_CONTRACTION, REACTOME_SMOOTH_MUSCLE_CONTRACTION
                                                                                                                     GOBP_PRESYNAPTIC_ENDOCYTOSIS, GOBP_PRESYNAPTIC_ENDOCYTOSIS
                                                                                                                      GSE3203_WT_VS_IFNAR1_KO_INFLUENZA_INFECTED_LN_BCELL_UP, GSE3203_WT_VS_IFNAR1_KO_INFLUENZA_INFECTED_LN_BCELL_UP
                                                                                                                     HP_ABNORMALITY_OF_IMMUNE_SERUM_PROTEIN_PHYSIOLOGY, HP_ABNORMALITY_OF_IMMUNE_SERUM_PROTEIN_PHYSIOLOGY
                                                                                                                     GOBP REGULATION OF CELLULAR RESPONSE TO INSULIN STIMULUS, GOBP REGULATION OF CELLULAR RESPONSE TO INSULIN STIMULUS
                                                                                                                     AZARE_NEOPLASTIC_TRANSFORMATION_BY_STAT3_DN, AZARE_NEOPLASTIC_TRANSFORMATION_BY_STAT3_DN
                                                                                                                     GOBP_INTERLEUKIN_2_PRODUCTION, GOBP_INTERLEUKIN_2_PRODUCTION
_TCELL_VS_MEMORY_TCELL_DN, GSE22886_NAIVE_CD4_TCELL_VS_MEMORY_TCELL_DN
                                                                                                                     GAZIN_EPIGENETIC_SILENCING_BY_KRAS, GAZIN_EPIGENETIC_SILENCING_BY_KRAS
                                                                                                                     HP_INCREASED_PROTEINOGENIC_AMINO_ACID_LEVEL_IN_URINE, HP_INCREASED_PROTEINOGENIC_AMINO_ACID_LEVEL_IN_URINE
                                                                                                                     GOCC_STRIATED_MUSCLE_THIN_FILAMENT, GOCC_STRIATED_MUSCLE_THIN_FILAMENT
                                                                                                                      HP_ABNORMAL_CIRCULATING_SULFUR_AMINO_ACID_CONCENTRATION, HP_ABNORMAL_CIRCULATING_SULFUR_AMINO_ACID_CONCENTRATION
                                                                                                                      OLSSON_E2F3_TARGETS_UP, OLSSON_E2F3_TARGETS_UP
                                                                                                                      GOBP_REGULATION_OF_EXECUTION_PHASE_OF_APOPTOSIS, GOBP_REGULATION_OF_EXECUTION_PHASE_OF_APOPTOSIS
                                                                                                                      GOBP_NEGATIVE_REGULATION_OF_EXECUTION_PHASE_OF_APOPTOSIS, GOBP_NEGATIVE_REGULATION_OF_EXECUTION_PHASE_OF_APOPTOSIS
                                                                                                                      DURANTE_ADULT_OLFACTORY_NEUROEPITHELIUM_RESPIRATORY_HORIZONTAL_BASAL_CELLS, DURANTE_ADULT_OLFACTORY_NEUROEPITHELIUM_RESPIRATORY_HORIZONTAL_BASAL_CELLS
                                                                                                                      HP_VENTRICULAR_TACHYCARDIA, HP_VENTRICULAR_TACHYCARDIA
                                                                                                                      GOBP_POSITIVE_REGULATION_OF_ENDOPLASMIC_RETICULUM_STRESS_INDUCED_INTRINSIC_APOPTOTIC_SIGNALING_PATHWAY, GOBP_POSITIVE_REGULATION_OF_ENDOPLASMIC_PATHWAY, GOBP_POSITIVE_REGULATION_OF_ENDOPLASMIC_PATHWAY, GOBP_POSITIVE_PATHWAY, GOBP_PATHWAY, GOB
                                                                                                                      HP_HEMOLYTIC_UREMIC_SYNDROME, HP_HEMOLYTIC_UREMIC_SYNDROME
                                                                                                                      HP_HYPERCONVEX_NAIL, HP_HYPERCONVEX_NAIL
                                                                                                                     HP_INCREASED_SULFUR_AMINO_ACID_LEVEL_IN_URINE, HP_INCREASED_SULFUR_AMINO_ACID_LEVEL_IN_URINE
                                                                                                                     GOBP_POSITIVE_REGULATION_OF_CELLULAR_RESPONSE_TO_INSULIN_STIMULUS, GOBP_POSITIVE_REGULATION_OF_CELLULAR_RESPONSE_TO_INSULIN_STIMULUS
                                                                                                                      WEINMANN_ADAPTATION_TO_HYPOXIA_UP, WEINMANN_ADAPTATION_TO_HYPOXIA_UP
                                                                                                                      HP_PATCHY_HYPOPIGMENTATION_OF_HAIR, HP_PATCHY_HYPOPIGMENTATION_OF_HAIR
                                                                                                                      MIZUSHIMA_AUTOPHAGOSOME_FORMATION, MIZUSHIMA_AUTOPHAGOSOME_FORMATION
                                                                                                                     GOCC_PROTEIN_PHOSPHATASE_TYPE_1_COMPLEX, GOCC_PROTEIN_PHOSPHATASE_TYPE_1_COMPLEX
                                                                                                                     NAKAMURA_ADIPOGENESIS_LATE_DN, NAKAMURA_ADIPOGENESIS_LATE_DN
                                                                                                                     GOBP_SYNAPTIC_TRANSMISSION_DOPAMINERGIC, GOBP_SYNAPTIC_TRANSMISSION_DOPAMINERGIC
                                                                                                                     TIAN_BHLHA15_TARGETS, TIAN_BHLHA15_TARGETS
                                                                                                                     GOBP_REGULATION_OF_CYTOPLASMIC_TRANSLATION, GOBP_REGULATION_OF_CYTOPLASMIC_TRANSLATION
                                                                                                                     GOBP_NEUROTRANSMITTER_REUPTAKE, GOBP_NEUROTRANSMITTER_REUPTAKE
                                                                                                                     GOBP_POSITIVE_REGULATION_OF_PEPTIDYL_THREONINE_PHOSPHORYLATION, GOBP_POSITIVE_REGULATION_OF_PEPTIDYL_THREONINE_PHOSPHORYLATION
                                                                                                                     REACTOME_ACTIVATION_OF_RAC1, REACTOME_ACTIVATION_OF_RAC1
                                                                                                                     REACTOME_SODIUM_CALCIUM_EXCHANGERS, REACTOME_SODIUM_CALCIUM_EXCHANGERS
                                                                                                                     GOBP_DOPAMINE_TRANSPORT, GOBP_DOPAMINE_TRANSPORT
                                                                                                                     GOBP_LYMPHOCYTE_CHEMOTAXIS, GOBP_LYMPHOCYTE_CHEMOTAXIS
                                                                                                                     GOMF_NEUROPEPTIDE_BINDING, GOMF_NEUROPEPTIDE_BINDING
                                                                                                                     GOMF_CCR6_CHEMOKINE_RECEPTOR_BINDING, GOMF_CCR6_CHEMOKINE_RECEPTOR_BINDING
                                                                                                                     chr13q13, chr13q13
                                                                                                                     HP_MEDULLARY_NEPHROCALCINOSIS, HP_MEDULLARY_NEPHROCALCINOSIS
                                                                                                                     ZNF491_TARGET_GENES, ZNF491_TARGET_GENES
                                                                                                                     HP_ABNORMAL_LUMBAR_SPINE_MORPHOLOGY, HP_ABNORMAL_LUMBAR_SPINE_MORPHOLOGY
                                                                                                                     GOBP_SOMITE_SPECIFICATION, GOBP_SOMITE_SPECIFICATION
                                                                                                                     MCM5_TARGET_GENES, MCM5_TARGET_GENES
                                                                                                                     REACTOME_IONOTROPIC_ACTIVITY_OF_KAINATE_RECEPTORS, REACTOME_IONOTROPIC_ACTIVITY_OF_KAINATE_RECEPTORS
                                                                                                                     WP_SCFA_AND_SKELETAL_MUSCLE_SUBSTRATE_METABOLISM, WP_SCFA_AND_SKELETAL_MUSCLE_SUBSTRATE_METABOLISM |
                                                                                                                     GOBP_NEGATIVE_REGULATION_OF_TRANSMISSION_OF_NERVE_IMPULSE, GOBP_NEGATIVE_REGULATION_OF_TRANSMISSION_OF_NERVE_IMPULSE
                                                                                                                     GOBP_REGULATION_OF_TRANSMISSION_OF_NERVE_IMPULSE, GOBP_REGULATION_OF_TRANSMISSION_OF_NERVE_IMPULSE
                                                                                                                     GOBP_NEGATIVE_REGULATION_OF_TRANSLATIONAL_ELONGATION, GOBP_NEGATIVE_REGULATION_OF_TRANSLATIONAL_ELONGATION
                                                                                                                     WP_VITAMIN_B6DEPENDENT_AND_RESPONSIVE_DISORDERS, WP_VITAMIN_B6DEPENDENT_AND_RESPONSIVE_DISORDERS
                                                                                                                     GOBP_REGULATION_OF_CATECHOLAMINE_UPTAKE_INVOLVED_IN_SYNAPTIC_TRANSMISSION, GOBP_REGULATION_OF_CATECHOLAMINE_UPTAKE_INVOLVED_IN_SYNAPTIC_TRANSMISSION
                                                                                                                     HP_CERVICAL_C2_C3_VERTEBRAL_FUSION, HP_CERVICAL_C2_C3_VERTEBRAL_FUSION
                                                                                                                     GOMF_STRUCTURAL_CONSTITUENT_OF_TOOTH_ENAMEL, GOMF_STRUCTURAL_CONSTITUENT_OF_TOOTH_ENAMEL
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GSE23398\_WT\_VS\_IL2\_KO\_CD4\_TCELL\_SCURFY\_MOUSE\_DN, GSE23398\_WT\_VS\_IL2\_KO\_CD4\_TCELL\_SCURFY\_MOUSE\_DN

GSE24292\_WT\_VS\_PPARG\_KO\_MACROPHAGE\_DN, GSE24292\_WT\_VS\_PPARG\_KO\_MACROPHAGE\_DN