```
GSE32533_WT_VS_MIR17_KO_ACT_CD4_TCELL_DN, GSE32533_WT_VS_MIR17_KO_ACT_CD4_TCELL_DN
                                                                                                                            GSE23321_CD8_STEM_CELL_MEMORY_VS_NAIVE_CD8_TCELL_DN, GSE23321_CD8_STEM_CELL_MEMORY_VS_NAIVE_CD8_TCELL_DN
                                                                                                                            GSE21063_3H_VS_16H_ANTI_IGM_STIM_BCELL_DN, GSE21063_3H_VS_16H_ANTI_IGM_STIM_BCELL_DN
                                                                                                                            GSE16266_CTRL_VS_HEATSHOCK_AND_LPS_STIM_MEF_DN, GSE16266_CTRL_VS_HEATSHOCK_AND_LPS_STIM_MEF_DN
                                                                                                                            GSE12366 GC_VS_MEMORY_BCELL_DN, GSE12366 GC_VS_MEMORY_BCELL_DN
                                                                                                                            GSE5542_UNTREATED_VS_IFNG_TREATED_EPITHELIAL_CELLS_6H_DN, GSE5542_UNTREATED_VS_IFNG_TREATED_EPITHELIAL_CELLS_6H_DN
                                                                                                                            GSE12366_GC_VS_NAIVE_BCELL_DN, GSE12366_GC_VS_NAIVE_BCELL_DN
                                                                                                                            GSE1432_CTRL_VS_IFNG_6H_MICROGLIA_UP, GSE1432_CTRL_VS_IFNG_6H_MICROGLIA_UP
                                                                                                                            GSE360_DC_VS_MAC_M_TUBERCULOSIS_DN, GSE360_DC_VS_MAC_M_TUBERCULOSIS_DN
                                                                                                                            GSE46606_UNSTIM_VS_CD40L_IL2_IL5_DAY1_STIMULATED_BCELL_UP, GSE46606_UNSTIM_VS_CD40L_IL2_IL5_DAY1_STIMULATED_BCELL_UP
                                                                                                                            GOCC_MITOTIC_SPINDLE, GOCC_MITOTIC_SPINDLE
                                                                                                                            GSE22886_UNSTIM_VS_STIM_MEMORY_TCELL_UP, GSE22886_UNSTIM_VS_STIM_MEMORY_TCELL_UP
                                                                                                                            GSE42021_TREG_PLN_VS_TREG_PRECURSORS_THYMUS_DN, GSE42021_TREG_PLN_VS_TREG_PRECURSORS_THYMUS_DN
                                                                                                                            GSE10422_WT_VS_BAFF_TRANSGENIC_LN_BCELL_UP, GSE10422_WT_VS_BAFF_TRANSGENIC_LN_BCELL_UP
                                                                                                                            GSE5542_UNTREATED_VS_IFNA_AND_IFNG_TREATED_EPITHELIAL_CELLS_6H_DN, GSE5542_UNTREATED_VS_IFNA_AND_IFNG_TREATED_EPITHELIAL_CELLS_6H_DN
                                                                                                                            GSE27786_NKTCELL_VS_NEUTROPHIL_DN, GSE27786_NKTCELL_VS_NEUTROPHIL_DN
                                                                                                                            GOBP_MITOTIC_SPINDLE_ASSEMBLY, GOBP_MITOTIC_SPINDLE_ASSEMBLY
                                                                                                                           GSE17721_CTRL_VS_POLYIC_2H_BMDC_UP, GSE17721_CTRL_VS_POLYIC_2H_BMDC_UP
                                                                                                                           GSE4984_GALECTIN1_VS_VEHICLE_CTRL_TREATED_DC_UP, GSE4984_GALECTIN1_VS_VEHICLE_CTRL_TREATED_DC_UP
                                                                                                                           GSE9037_WT_VS_IRAK4_KO_LPS_1H_STIM_BMDM_UP, GSE9037_WT_VS_IRAK4_KO_LPS_1H_STIM_BMDM_UP
                                                                                                                            GOCC_PROTEIN_ACETYLTRANSFERASE_COMPLEX, GOCC_PROTEIN_ACETYLTRANSFERASE_COMPLEX
                                                                                                                            CSR_EARLY_UP.V1_DN, CSR_EARLY_UP.V1_DN
                                                                                                                            GSE34006_WT_VS_A2AR_KO_TREG_DN, GSE34006_WT_VS_A2AR_KO_TREG_DN
                                                                                                                            GSE36009_UNSTIM_VS_LPS_STIM_DC_UP, GSE36009_UNSTIM_VS_LPS_STIM_DC_UP
                                                                                                                            GSE10325_LUPUS_CD4_TCELL_VS_LUPUS_MYELOID_UP, GSE10325_LUPUS_CD4_TCELL_VS_LUPUS_MYELOID_UP
                                                                                                                            JAZAG_TGFB1_SIGNALING_UP, JAZAG_TGFB1_SIGNALING_UP
                                                                                                                           GOBP_LYSOSOMAL_TRANSPORT, GOBP_LYSOSOMAL_TRANSPORT
                                                                                                                           MIR6881_3P, MIR6881_3P
                                                                                                                           GSE1460_NAIVE_CD4_TCELL_ADULT_BLOOD_VS_THYMIC_STROMAL_CELL_UP, GSE1460_NAIVE_CD4_TCELL_ADULT_BLOOD_VS_THYMIC_STROMAL_CELL_UP
                                                                                                                            GSE16385_IFNG_TNF_VS_UNSTIM_MACROPHAGE_ROSIGLITAZONE_TREATED_UP, GSE16385_IFNG_TNF_VS_UNSTIM_MACROPHAGE_ROSIGLITAZONE_TREATED_UP
                                                                                                                            GSE40274_CTRL_VS_GATA1_TRANSDUCED_ACTIVATED_CD4_TCELL_UP, GSE40274_CTRL_VS_GATA1_TRANSDUCED_ACTIVATED_CD4_TCELL_UP
                                                                                                                            MIR4786 3P, MIR4786 3P
                                                                                                                            GOBP_REGULATION_OF_VIRAL_LIFE_CYCLE, GOBP_REGULATION_OF_VIRAL_LIFE_CYCLE
                                                                                                                            GOCC_GOLGI_ASSOCIATED_VESICLE, GOCC_GOLGI_ASSOCIATED_VESICLE
                                                                                                                            BOSCO_INTERFERON_INDUCED_ANTIVIRAL_MODULE, BOSCO_INTERFERON_INDUCED_ANTIVIRAL_MODULE
                                                                                                                            AMBROSINI_FLAVOPIRIDOL_TREATMENT_TP53, AMBROSINI_FLAVOPIRIDOL_TREATMENT_TP53
                                                                                                                            KESHELAVA_MULTIPLE_DRUG_RESISTANCE, KESHELAVA_MULTIPLE_DRUG_RESISTANCE
                                                                                                                            GSE20198_UNTREATED_VS_IFNA_TREATED_ACT_CD4_TCELL_UP, GSE20198_UNTREATED_VS_IFNA_TREATED_ACT_CD4_TCELL_UP
                                                                                                                            GCM_ERBB2IP, GCM_ERBB2IP
                                                                                                                            GOBP_MAINTENANCE_OF_PROTEIN_LOCATION, GOBP_MAINTENANCE_OF_PROTEIN_LOCATION
                                                                                                                            GSE6269_STAPH_AUREUS_VS_STREP_PNEUMO_INF_PBMC_DN, GSE6269_STAPH_AUREUS_VS_STREP_PNEUMO_INF_PBMC_DN
                                                                                                                            HP_CONFUSION, HP_CONFUSION
                                                                                                                           GSE21360_PRIMARY_VS_SECONDARY_MEMORY_CD8_TCELL_DN, GSE21360_PRIMARY_VS_SECONDARY_MEMORY_CD8_TCELL_DN
                                                                                                                            WP_DNA_DAMAGE_RESPONSE, WP_DNA_DAMAGE_RESPONSE
                                                                                                                           GSE3982_BCELL_VS_TH1_UP, GSE3982_BCELL_VS_TH1_UP
                                                                                                                           MORF_ORC1L, MORF_ORC1L
                                                                                                                           HP_ABNORMAL_CHORIORETINAL_MORPHOLOGY, HP_ABNORMAL_CHORIORETINAL_MORPHOLOGY
                                                                                                                           MIR6806_5P, MIR6806_5P
                                                                                                                           GOMF_P53_BINDING, GOMF_P53_BINDING
                                                                                                                            DER_IFN_ALPHA_RESPONSE_UP, DER_IFN_ALPHA_RESPONSE_UP
                                                                                                                            PLASARI_TGFB1_SIGNALING_VIA_NFIC_1HR_DN, PLASARI_TGFB1_SIGNALING_VIA_NFIC_1HR_DN
                                                                                                                            HP_IMMUNOLOGIC_HYPERSENSITIVITY, HP_IMMUNOLOGIC_HYPERSENSITIVITY
                                                                                                                           MIR26B_3P, MIR26B_3P
                                                                                                                           WP_APOPTOSIS, WP_APOPTOSIS
                                                                                                                           GOMF_PEPTIDE_N_ACETYLTRANSFERASE_ACTIVITY, GOMF_PEPTIDE_N_ACETYLTRANSFERASE_ACTIVITY
                                                                                                                            GOBP_STEROL_BIOSYNTHETIC_PROCESS, GOBP_STEROL_BIOSYNTHETIC_PROCESS
                                                                                                                            HP_CHRONIC_DIARRHEA, HP_CHRONIC_DIARRHEA
                                                                                                                            REACTOME_SARS_COV_1_INFECTION, REACTOME_SARS_COV_1_INFECTION
                                                                                                                            GSE4590_PRE_BCELL_VS_VPREB_POS_LARGE_PRE_BCELL_UP, GSE4590_PRE_BCELL_VS_VPREB_POS_LARGE_PRE_BCELL_UP
                                                                                                                            MIR24_1_5P_MIR24_2_5P, MIR24_1_5P_MIR24_2_5P
                                                                                                                           GOBP_MAINTENANCE_OF_PROTEIN_LOCATION_IN_CELL, GOBP_MAINTENANCE_OF_PROTEIN_LOCATION_IN_CELL
                                                                                                                            GOBP_REGULATION_OF_SPINDLE_ORGANIZATION, GOBP_REGULATION_OF_SPINDLE_ORGANIZATION
                                                                                                                            WP_FAS_LIGAND_FASL_PATHWAY_AND_STRESS_INDUCTION_OF_HEAT_SHOCK_PROTEINS_HSP_REGULATION, WP_FAS_LIGAND_FASL_PATHWAY_AND_STRESS_INDUCTION_OF_HEAT_SHOCK_PROTEINS_HSP_REGULATION
                                                                                                                            MIR4716 3P, MIR4716 3P
                                                                                                                            BIOCARTA_FAS_PATHWAY, BIOCARTA_FAS_PATHWAY
                                                                                                                            GOMF_OXIDOREDUCTASE_ACTIVITY_ACTING_ON_A_SULFUR_GROUP_OF_DONORS, GOMF_OXIDOREDUCTASE_ACTIVITY_ACTING_ON_A_SULFUR_GROUP_OF_DONORS
                                                                                                                            WP_HEPATITIS_B_INFECTION, WP_HEPATITIS_B_INFECTION
                                                                                                                            REACTOME_TRANSLATION_OF_SARS_COV_2_STRUCTURAL_PROTEINS, REACTOME_TRANSLATION_OF_SARS_COV_2_STRUCTURAL_PROTEINS
                                                                                                                            GOBP_VIRAL_RELEASE_FROM_HOST_CELL, GOBP_VIRAL_RELEASE_FROM_HOST_CELL
                                                                                                                            GOMF_N_ACETYLTRANSFERASE_ACTIVITY, GOMF_N_ACETYLTRANSFERASE_ACTIVITY
                                                                                                                            MIR6794_5P, MIR6794_5P
                                                                                                                            GOMF_PEPTIDE_LYSINE_N_ACETYLTRANSFERASE_ACTIVITY, GOMF_PEPTIDE_LYSINE_N_ACETYLTRANSFERASE_ACTIVITY
                                                                                                                            REACTOME_SIGNALING_BY_ERBB2, REACTOME_SIGNALING_BY_ERBB2
                                                                                                                            GOCC_H4_HISTONE_ACETYLTRANSFERASE_COMPLEX, GOCC_H4_HISTONE_ACETYLTRANSFERASE_COMPLEX
                                                                                                                            REACTOME_TP53_REGULATES_TRANSCRIPTION_OF_CELL_DEATH_GENES, REACTOME_TP53_REGULATES_TRANSCRIPTION_OF_CELL_DEATH_GENES
                                                                                                                            MIR12113, MIR12113
                                                                                                                            MIR100 3P, MIR100 3P
                                                                                                                            MIR4539, MIR4539
                                                                                                                            GOMF_N_ACYLTRANSFERASE_ACTIVITY, GOMF_N_ACYLTRANSFERASE_ACTIVITY
                                                                                                                            GOCC_GOLGI_ASSOCIATED_VESICLE_MEMBRANE, GOCC_GOLGI_ASSOCIATED_VESICLE_MEMBRANE
                                                                                                                            REACTOME_DDX58_IFIH1_MEDIATED_INDUCTION_OF_INTERFERON_ALPHA_BETA, REACTOME_DDX58_IFIH1_MEDIATED_INDUCTION_OF_INTERFERON_ALPHA_BETA
                                                                                                                            GOBP_PROTEIN_EXIT_FROM_ENDOPLASMIC_RETICULUM, GOBP_PROTEIN_EXIT_FROM_ENDOPLASMIC_RETICULUM
                                                                                                                           GOBP_MAINTENANCE_OF_PROTEIN_LOCALIZATION_IN_ORGANELLE, GOBP_MAINTENANCE_OF_PROTEIN_LOCALIZATION_IN_ORGANELLE
                                                                                                                            HP_ABNORMAL_PERICARDIUM_MORPHOLOGY, HP_ABNORMAL_PERICARDIUM_MORPHOLOGY
                                                                                                                            REACTOME_REGULATION_OF_TP53_ACTIVITY_THROUGH_METHYLATION, REACTOME_REGULATION_OF_TP53_ACTIVITY_THROUGH_METHYLATION
                                                                                                                            GSE21546_UNSTIM_VS_ANTI_CD3_STIM_SAP1A_KO_AND_ELK1_KO_DP_THYMOCYTES_UP, GSE21546_UNSTIM_VS_ANTI_CD3_STIM_SAP1A_KO_AND_ELK1_KO_DP_THYMOCYTES_UP
                                                                                                                            HP_PLEURAL_EFFUSION, HP_PLEURAL_EFFUSION
                                                                                                                            GOBP_REGULATION_OF_SPINDLE_ASSEMBLY, GOBP_REGULATION_OF_SPINDLE_ASSEMBLY
                                                                                                                            HP GANGRENE, HP GANGRENE
                                                                                                                            WP_AGERAGE_PATHWAY, WP_AGERAGE_PATHWAY
                                                                                                                            PID_TAP63_PATHWAY, PID_TAP63_PATHWAY
                                                                                                                            HP_ABNORMAL_PLEURA_MORPHOLOGY, HP_ABNORMAL_PLEURA_MORPHOLOGY
                                                                                                                            MARTINEZ_RESPONSE_TO_TRABECTEDIN, MARTINEZ_RESPONSE_TO_TRABECTEDIN
                                                                                                                            GOBP_NEGATIVE_REGULATION_OF_I_KAPPAB_KINASE_NF_KAPPAB_SIGNALING, GOBP_NEGATIVE_REGULATION_OF_I_KAPPAB_KINASE_NF_KAPPAB_SIGNALING
                                                                                                                            WP_TNF_RELATED_WEAK_INDUCER_OF_APOPTOSIS_TWEAK_SIGNALING_PATHWAY, WP_TNF_RELATED_WEAK_INDUCER_OF_APOPTOSIS_TWEAK_SIGNALING_PATHWAY
                                                                                                                            HP_PULMONARY_INFILTRATES, HP_PULMONARY_INFILTRATES
                                                                                                                            AHRARNT_01, AHRARNT_01
                                                                                                                            HP_ABNORMALITY_OF_T_CELL_PHYSIOLOGY, HP_ABNORMALITY_OF_T_CELL_PHYSIOLOGY
                                                                                                                            SIG_BCR_SIGNALING_PATHWAY, SIG_BCR_SIGNALING_PATHWAY
                                                                                                                            MORF_ZNF10, MORF_ZNF10
                                                                                                                            ZHAN_MULTIPLE_MYELOMA_MS_DN, ZHAN_MULTIPLE_MYELOMA_MS_DN
                                                                                                                            GOBP_PROTEIN_LOCALIZATION_TO_CHROMATIN, GOBP_PROTEIN_LOCALIZATION_TO_CHROMATIN
                                                                                                                            MIR595, MIR595
                                                                                                                            GOBP_REGULATION_OF_TRANSPOSITION, GOBP_REGULATION_OF_TRANSPOSITION
                                                                                                                            ACATATC_MIR190, ACATATC_MIR190
                                                                                                                            GOBP_REGULATION_OF_MITOTIC_SPINDLE_ASSEMBLY, GOBP_REGULATION_OF_MITOTIC_SPINDLE_ASSEMBLY
                                                                                                                            HOLLEMAN_VINCRISTINE_RESISTANCE_B_ALL_UP, HOLLEMAN_VINCRISTINE_RESISTANCE_B_ALL_UP
                                                                                                                            HP_HYPOPLASIA_OF_THE_PONS, HP_HYPOPLASIA_OF_THE_PONS
                                                                                                                            REACTOME FOXO MEDIATED TRANSCRIPTION, REACTOME FOXO MEDIATED TRANSCRIPTION
                                                                                                                            BIOCARTA_INTEGRIN_PATHWAY, BIOCARTA_INTEGRIN_PATHWAY
                                                                                                                            MIR7153_3P, MIR7153_3P
                                                                                                                            HP_ABNORMAL_CIRCULATING_IGG_LEVEL, HP_ABNORMAL_CIRCULATING_IGG_LEVEL
                                                                                                                            WP_TCELL_ANTIGEN_RECEPTOR_TCR_SIGNALING_PATHWAY, WP_TCELL_ANTIGEN_RECEPTOR_TCR_SIGNALING_PATHWAY
                                                                                                                            GOBP_NEGATIVE_REGULATION_OF_VIRAL_PROCESS, GOBP_NEGATIVE_REGULATION_OF_VIRAL_PROCESS
                                                                                                                            HP_STOMATITIS, HP_STOMATITIS
                                                                                                                            HP_ABNORMAL_T_CELL_SUBSET_DISTRIBUTION, HP_ABNORMAL_T_CELL_SUBSET_DISTRIBUTION
                                                                                                                            GSE28130_ACTIVATED_VS_INDUCEED_TREG_DN, GSE28130_ACTIVATED_VS_INDUCEED_TREG_DN
                                                                                                                            GNF2_CASP4, GNF2_CASP4
                                                                                                                            HP_ABNORMAL_PULMONARY_THORACIC_IMAGING_FINDING, HP_ABNORMAL_PULMONARY_THORACIC_IMAGING_FINDING
                                                                                                                            MIR374C_3P, MIR374C_3P
                                                                                                                            MIR1251_5P, MIR1251_5P
                                                                                                                           GOBP_ENDOTHELIUM_DEVELOPMENT, GOBP_ENDOTHELIUM_DEVELOPMENT
                                                                                                                            BONOME_OVARIAN_CANCER_POOR_SURVIVAL_DN, BONOME_OVARIAN_CANCER_POOR_SURVIVAL_DN
                                                                                                                            SCIBETTA_KDM5B_TARGETS_UP, SCIBETTA_KDM5B_TARGETS_UP
                                                                                                                           YORDY_RECIPROCAL_REGULATION_BY_ETS1_AND_SP100_DN, YORDY_RECIPROCAL_REGULATION_BY_ETS1_AND_SP100_DN
                                                                                                                           HP_DECREASED_CIRCULATING_IGG_LEVEL, HP_DECREASED_CIRCULATING_IGG_LEVEL
                                                                                                                           MORF_EPHA7, MORF_EPHA7
                                                                                                                           GOCC_TRANS_GOLGI_NETWORK_TRANSPORT_VESICLE, GOCC_TRANS_GOLGI_NETWORK_TRANSPORT_VESICLE
                                                                                                                           HP_SELF_MUTILATION, HP_SELF_MUTILATION
                                                                                                                           GOBP_KINETOCHORE_ORGANIZATION, GOBP_KINETOCHORE_ORGANIZATION
                                                                                                                            MIR193B 5P, MIR193B 5P
                                                                                                                            ANDERSEN_CHOLANGIOCARCINOMA_CLASS1, ANDERSEN_CHOLANGIOCARCINOMA_CLASS1
                                                                                                                            GOBP_REGULATION_OF_CENTRIOLE_REPLICATION, GOBP_REGULATION_OF_CENTRIOLE_REPLICATION
                                                                                                                           GOBP_REGULATION_OF_SPINDLE_CHECKPOINT, GOBP_REGULATION_OF_SPINDLE_CHECKPOINT
                                                                                                                            KYNG_DNA_DAMAGE_BY_GAMMA_AND_UV_RADIATION, KYNG_DNA_DAMAGE_BY_GAMMA_AND_UV_RADIATION
                                                                                                                           GOBP_TRANSPOSITION, GOBP_TRANSPOSITION
                                                                                                                            REACTOME_MATURATION_OF_SARS_COV_2_SPIKE_PROTEIN, REACTOME_MATURATION_OF_SARS_COV_2_SPIKE_PROTEIN
                                                                                                                            WP_RESISTIN_AS_A_REGULATOR_OF_INFLAMMATION, WP_RESISTIN_AS_A_REGULATOR_OF_INFLAMMATION
                                                                                                                            HP_IMPAIRED_ANTIGEN_SPECIFIC_RESPONSE, HP_IMPAIRED_ANTIGEN_SPECIFIC_RESPONSE
                                                                                                                            GOBP_CIRCADIAN_REGULATION_OF_GENE_EXPRESSION, GOBP_CIRCADIAN_REGULATION_OF_GENE_EXPRESSION
                                                                                                                            GOBP_POSITIVE_REGULATION_OF_NEUTROPHIL_MIGRATION, GOBP_POSITIVE_REGULATION_OF_NEUTROPHIL_MIGRATION
                                                                                                                            BIOCARTA_DEATH_PATHWAY, BIOCARTA_DEATH_PATHWAY
                                                                                                                            HP_ENCEPHALITIS, HP_ENCEPHALITIS
                                                                                                                            HP_ABNORMAL_UPPER_MOTOR_NEURON_MORPHOLOGY, HP_ABNORMAL_UPPER_MOTOR_NEURON_MORPHOLOGY
                                                                                                                            GOBP_NEGATIVE_REGULATION_OF_VIRAL_GENOME_REPLICATION, GOBP_NEGATIVE_REGULATION_OF_VIRAL_GENOME_REPLICATION
                                                                                                                            GOBP_POSITIVE_REGULATION_OF_MACROAUTOPHAGY, GOBP_POSITIVE_REGULATION_OF_MACROAUTOPHAGY
                                                                                                                            MEISSNER_NPC_HCP_WITH_H3K27ME3, MEISSNER_NPC_HCP_WITH_H3K27ME3
                                                                                                                            MIR4751, MIR4751
                                                                                                                            PID_HIV_NEF_PATHWAY, PID_HIV_NEF_PATHWAY
                                                                                                                            MIR4658, MIR4658
                                                                                                                            REACTOME_TRANSLATION_OF_SARS_COV_1_STRUCTURAL_PROTEINS, REACTOME_TRANSLATION_OF_SARS_COV_1_STRUCTURAL_PROTEINS
                                                                                                                            HP_ABNORMAL_PROPORTION_OF_CD4_POSITIVE_T_CELLS, HP_ABNORMAL_PROPORTION_OF_CD4_POSITIVE_T_CELLS
Y_VS_CENTRAL_MEMORY_CD8_TCELL_DN, GSE23321_CD8_STEM_CELL_MEMORY_VS_CENTRAL_MEMORY_CD8_TCELL_DN
                                                                                                                           MIR6861_3P, MIR6861_3P
                                                                                                                            MIR490_3P, MIR490_3P
                                                                                                                            MIR6790 5P, MIR6790 5P
                                                                                                                            REACTOME_NOD1_2_SIGNALING_PATHWAY, REACTOME_NOD1_2_SIGNALING_PATHWAY
                                                                                                                            GOMF_14_3_3_PROTEIN_BINDING, GOMF_14_3_3_PROTEIN_BINDING
                                                                                                                            NAGASHIMA_NRG1_SIGNALING_DN, NAGASHIMA_NRG1_SIGNALING_DN
                                                                                                                            GSE41176_UNSTIM_VS_ANTI_IGM_STIM_TAK1_KO_BCELL_3H_UP, GSE41176_UNSTIM_VS_ANTI_IGM_STIM_TAK1_KO_BCELL_3H_UP
                                                                                                                            WP_OXIDATIVE_STRESS, WP_OXIDATIVE_STRESS
                                                                                                                            HP_ABNORMAL_T_CELL_MORPHOLOGY, HP_ABNORMAL_T_CELL_MORPHOLOGY
                                                                                                                            WP_TYPE_I_INTERFERON_INDUCTION_AND_SIGNALING_DURING_SARSCOV2_INFECTION, WP_TYPE_I_INTERFERON_INDUCTION_AND_SIGNALING_DURING_SARSCOV2_INFECTION
                                                                                                                            GOBP_NEURON_DEATH_IN_RESPONSE_TO_OXIDATIVE_STRESS, GOBP_NEURON_DEATH_IN_RESPONSE_TO_OXIDATIVE_STRESS
                                                                                                                            GOBP_REGULATION_OF_CHROMATIN_ASSEMBLY_OR_DISASSEMBLY, GOBP_REGULATION_OF_CHROMATIN_ASSEMBLY_OR_DISASSEMBLY
                                                                                                                            HP RECURRENT VIRAL INFECTIONS, HP RECURRENT VIRAL INFECTIONS
                                                                                                                            GOMF_GLUCOSYLTRANSFERASE_ACTIVITY, GOMF_GLUCOSYLTRANSFERASE_ACTIVITY
                                                                                                                            REACTOME_RIPK1_MEDIATED_REGULATED_NECROSIS, REACTOME_RIPK1_MEDIATED_REGULATED_NECROSIS
                                                                                                                            GOBP_GLUCAN_BIOSYNTHETIC_PROCESS, GOBP_GLUCAN_BIOSYNTHETIC_PROCESS
                                                                                                                            GNF2_CASP8, GNF2_CASP8
                                                                                                                            VANHARANTA_UTERINE_FIBROID_WITH_7Q_DELETION_DN, VANHARANTA_UTERINE_FIBROID_WITH_7Q_DELETION_DN
                                                                                                                            REACTOME_REGULATION_OF_RUNX1_EXPRESSION_AND_ACTIVITY, REACTOME_REGULATION_OF_RUNX1_EXPRESSION_AND_ACTIVITY
                                                                                                                            WP_CHEMOKINE_SIGNALING_PATHWAY, WP_CHEMOKINE_SIGNALING_PATHWAY
                                                                                                                            MIR1298_3P, MIR1298_3P
                                                                                                                           GOBP_POSITIVE_REGULATION_OF_CYTOKINESIS, GOBP_POSITIVE_REGULATION_OF_CYTOKINESIS
                                                                                                                           PID_AR_TF_PATHWAY, PID_AR_TF_PATHWAY
                                                                                                                           HP_ABNORMAL_CARDIAC_TEST, HP_ABNORMAL_CARDIAC_TEST
                                                                                                                           HP_OLIGOMENORRHEA, HP_OLIGOMENORRHEA
                                                                                                                           HOLLEMAN_VINCRISTINE_RESISTANCE_ALL_UP, HOLLEMAN_VINCRISTINE_RESISTANCE_ALL_UP
                                                                                                                            MORF_BMPR2, MORF_BMPR2
                                                                                                                            HARALAMBIEVA_PBMC_TIV_AGE_50_74YO_CORRELATED_WITH_MEMORY_B_CELL_RESPONSE_28DY_NEGATIVE, HARALAMBIEVA_PBMC_TIV_AGE_50_74YO_CORRELATED_WITH_MEMORY_B_CELL_RESPONSE_28DY_NEGATIVE
                                                                                                                            BIOCARTA_CASPASE_PATHWAY, BIOCARTA_CASPASE_PATHWAY
                                                                                                                            FIGUEROA_AML_METHYLATION_CLUSTER_1_DN, FIGUEROA_AML_METHYLATION_CLUSTER_1_DN
                                                                                                                           GOBP_NEGATIVE_REGULATION_OF_MACROAUTOPHAGY, GOBP_NEGATIVE_REGULATION_OF_MACROAUTOPHAGY
                                                                                                                           GOBP_MAINTENANCE_OF_PROTEIN_LOCATION_IN_NUCLEUS, GOBP_MAINTENANCE_OF_PROTEIN_LOCATION_IN_NUCLEUS
                                                                                                                            SA_PTEN_PATHWAY, SA_PTEN_PATHWAY
                                                                                                                           GOBP_PROTEIN_LOCALIZATION_TO_GOLGI_APPARATUS, GOBP_PROTEIN_LOCALIZATION_TO_GOLGI_APPARATUS
                                                                                                                            HP_MYOSITIS, HP_MYOSITIS
                                                                                                                            PID_TRAIL_PATHWAY, PID_TRAIL_PATHWAY
                                                                                                                            GOBP_NEGATIVE_REGULATION_OF_ANION_TRANSMEMBRANE_TRANSPORT, GOBP_NEGATIVE_REGULATION_OF_ANION_TRANSMEMBRANE_TRANSPORT
                                                                                                                            HP_URINARY_URGENCY, HP_URINARY_URGENCY
                                                                                                                            HP_SPASTIC_DYSARTHRIA, HP_SPASTIC_DYSARTHRIA
                                                                                                                            HP_PLEURITIS, HP_PLEURITIS
                                                                                                                            HP_ARTERIAL_THROMBOSIS, HP_ARTERIAL_THROMBOSIS
                                                                                                                            GOBP_NUCLEOBASE_CONTAINING_SMALL_MOLECULE_CATABOLIC_PROCESS, GOBP_NUCLEOBASE_CONTAINING_SMALL_MOLECULE_CATABOLIC_PROCESS
                                                                                                                            HP_REPETITIVE_COMPULSIVE_BEHAVIOR, HP_REPETITIVE_COMPULSIVE_BEHAVIOR
                                                                                                                            REACTOME_REGULATION_OF_PTEN_LOCALIZATION, REACTOME_REGULATION_OF_PTEN_LOCALIZATION
                                                                                                                            WP_TLR4_SIGNALING_AND_TOLERANCE, WP_TLR4_SIGNALING_AND_TOLERANCE
                                                                                                                            MIR5581_5P, MIR5581_5P
                                                                                                                            REACTOME_CASPASE_ACTIVATION_VIA_EXTRINSIC_APOPTOTIC_SIGNALLING_PATHWAY, REACTOME_CASPASE_ACTIVATION_VIA_EXTRINSIC_APOPTOTIC_SIGNALLING_PATHWAY
                                                                                                                            GOBP REGULATION OF OXIDATIVE STRESS INDUCED NEURON DEATH, GOBP REGULATION OF OXIDATIVE STRESS INDUCED NEURON DEATH
                                                                                                                            GOBP_REGULATION_OF_NEUTROPHIL_MIGRATION, GOBP_REGULATION_OF_NEUTROPHIL_MIGRATION
                                                                                                                            GOBP_NUCLEAR_BODY_ORGANIZATION, GOBP_NUCLEAR_BODY_ORGANIZATION
                                                                                                                            CHIARADONNA_NEOPLASTIC_TRANSFORMATION_KRAS_CDC25_DN, CHIARADONNA_NEOPLASTIC_TRANSFORMATION_KRAS_CDC25_DN
                                                                                                                            MIR4423_5P, MIR4423_5P
                                                                                                                            GOBP_REGULATION_OF_EXTRINSIC_APOPTOTIC_SIGNALING_PATHWAY_VIA_DEATH_DOMAIN_RECEPTORS, GOBP_REGULATION_OF_EXTRINSIC_APOPTOTIC_SIGNALING_PATHWAY_VIA_DEATH_DOMAIN_RECEPTORS
                                                                                                                            HP_BONE_MARROW_HYPERCELLULARITY, HP_BONE_MARROW_HYPERCELLULARITY
                                                                                                                            GSE18281_SUBCAPSULAR_CORTICAL_REGION_VS_WHOLE_MEDULLA_THYMUS_DN, GSE18281_SUBCAPSULAR_CORTICAL_REGION_VS_WHOLE_MEDULLA_THYMUS_DN
                                                                                                                            GOBP_PEPTIDYL_METHIONINE_MODIFICATION, GOBP_PEPTIDYL_METHIONINE_MODIFICATION
                                                                                                                            HP_JOINT_CONTRACTURES_INVOLVING_THE_JOINTS_OF_THE_FEET, HP_JOINT_CONTRACTURES_INVOLVING_THE_JOINTS_OF_THE_FEET
                                                                                                                            MIR3117_3P, MIR3117_3P
                                                                                                                            GOBERT CORE OLIGODENDROCYTE DIFFERENTIATION, GOBERT CORE OLIGODENDROCYTE DIFFERENTIATION
                                                                                                                            GOBP_NEGATIVE_REGULATION_OF_VIRAL_RELEASE_FROM_HOST_CELL, GOBP_NEGATIVE_REGULATION_OF_VIRAL_RELEASE_FROM_HOST_CELL
                                                                                                                            GOBP_TORC2_SIGNALING, GOBP_TORC2_SIGNALING
                                                                                                                            GOBP_REGULATION_OF_CALCIUM_ION_TRANSPORT_INTO_CYTOSOL, GOBP_REGULATION_OF_CALCIUM_ION_TRANSPORT_INTO_CYTOSOL
                                                                                                                            WP_MEVALONATE_PATHWAY, WP_MEVALONATE_PATHWAY
                                                                                                                            GOBP_EXTRINSIC_APOPTOTIC_SIGNALING_PATHWAY_VIA_DEATH_DOMAIN_RECEPTORS, GOBP_EXTRINSIC_APOPTOTIC_SIGNALING_PATHWAY_VIA_DEATH_DOMAIN_RECEPTORS
                                                                                                                            GOCC_NUCLEAR_INCLUSION_BODY, GOCC_NUCLEAR_INCLUSION_BODY
                                                                                                                            GOMF_ACYLGLYCEROL_LIPASE_ACTIVITY, GOMF_ACYLGLYCEROL_LIPASE_ACTIVITY
                                                                                                                            HP_PULMONARY_EMBOLISM, HP_PULMONARY_EMBOLISM
                                                                                                                            HP_ABNORMAL_PLATELET_FUNCTION, HP_ABNORMAL_PLATELET_FUNCTION
                                                                                                                            HP_DECREASED_CIRCULATING_LEVEL_OF_SPECIFIC_ANTIBODY, HP_DECREASED_CIRCULATING_LEVEL_OF_SPECIFIC_ANTIBODY
                                                                                                                            MORF RAB3A, MORF RAB3A
                                                                                                                            MIR1298_5P, MIR1298_5P
                                                                                                                            GOBP_NEGATIVE_REGULATION_OF_PROTEIN_LOCALIZATION_TO_CELL_PERIPHERY, GOBP_NEGATIVE_REGULATION_OF_PROTEIN_LOCALIZATION_TO_CELL_PERIPHERY
                                                                                                                            GOBP_REGULATION_OF_GOLGI_TO_PLASMA_MEMBRANE_PROTEIN_TRANSPORT, GOBP_REGULATION_OF_GOLGI_TO_PLASMA_MEMBRANE_PROTEIN_TRANSPORT
                                                                                                                            GOBP_REGULATION_OF_GLUCAN_BIOSYNTHETIC_PROCESS, GOBP_REGULATION_OF_GLUCAN_BIOSYNTHETIC_PROCESS
                                                                                                                            GOBP_ESCRT_COMPLEX_DISASSEMBLY, GOBP_ESCRT_COMPLEX_DISASSEMBLY
                                                                                                                            BIOCARTA_FREE_PATHWAY, BIOCARTA_FREE_PATHWAY
                                                                                                                            GOCC_ARP2_3_PROTEIN_COMPLEX, GOCC_ARP2_3_PROTEIN_COMPLEX
                                                                                                                            REACTOME REGULATION OF PTEN MRNA TRANSLATION, REACTOME REGULATION OF PTEN MRNA TRANSLATION
                                                                                                                            HP_T_LYMPHOCYTOPENIA, HP_T_LYMPHOCYTOPENIA
                                                                                                                            BIOCARTA_SRCRPTP_PATHWAY, BIOCARTA_SRCRPTP_PATHWAY
                                                                                                                            MIR6826 5P, MIR6826 5P
                                                                                                                            GOBP_PEPTIDYL_LYSINE_DIMETHYLATION, GOBP_PEPTIDYL_LYSINE_DIMETHYLATION
                                                                                                                            HP_ENDOCARDITIS, HP_ENDOCARDITIS
                                                                                                                            GOBP_HISTONE_H3_K9_MODIFICATION, GOBP_HISTONE_H3_K9_MODIFICATION
                                                                                                                            GOBP_REGULATION_OF_POLYSACCHARIDE_BIOSYNTHETIC_PROCESS, GOBP_REGULATION_OF_POLYSACCHARIDE_BIOSYNTHETIC_PROCESS
                                                                                                                            BIOCARTA_NTHI_PATHWAY, BIOCARTA_NTHI_PATHWAY
                                                                                                                            MIR23B 5P, MIR23B 5P
                                                                                                                            ZHAN_LATE_DIFFERENTIATION_GENES_DN, ZHAN_LATE_DIFFERENTIATION_GENES_DN
                                                                                                                            REACTOME_FOXO_MEDIATED_TRANSCRIPTION_OF_CELL_DEATH_GENES, REACTOME_FOXO_MEDIATED_TRANSCRIPTION_OF_CELL_DEATH_GENES
                                                                                                                           VETTER_TARGETS_OF_PRKCA_AND_ETS1_UP, VETTER_TARGETS_OF_PRKCA_AND_ETS1_UP
                                                                                                                           FOURATI_BLOOD_TWINRIX_AGE_65_83YO_POOR_RESPONDERS_VS_RESPONDERS_0DY_NETWORK_INFERENCE_UP, FOURATI_BLOOD_TWINRIX_AGE_65_83YO_POOR_RESPONDERS_VS_RESPONDERS_0DY_NETWORK_INFERENCE_UP
                                                                                                                            GOBP_SRP_DEPENDENT_COTRANSLATIONAL_PROTEIN_TARGETING_TO_MEMBRANE_TRANSLOCATION, GOBP_SRP_DEPENDENT_COTRANSLATIONAL_PROTEIN_TARGETING_TO_MEMBRANE_TRANSLOCATION
                                                                                                                            GOBP_PROTEIN_POLY_ADP_RIBOSYLATION, GOBP_PROTEIN_POLY_ADP_RIBOSYLATION
                                                                                                                            GOBP_NECROPTOTIC_PROCESS, GOBP_NECROPTOTIC_PROCESS
                                                                                                                            GOBP_RESPONSE_TO_HYDROXYUREA, GOBP_RESPONSE_TO_HYDROXYUREA
                                                                                                                            HP_HEPATIC_CYSTS, HP_HEPATIC_CYSTS
                                                                                                                            HP_NEOPLASM_OF_THE_TONGUE, HP_NEOPLASM_OF_THE_TONGUE
                                                                                                                           HP_DIAPHRAGMATIC_EVENTRATION, HP_DIAPHRAGMATIC_EVENTRATION
                                                                                                                           HP_SEROSITIS, HP_SEROSITIS
                                                                                                                           HP_HAND_TREMOR, HP_HAND_TREMOR
                                                                                                                           GOBP_REGULATION_OF_MYOSIN_LIGHT_CHAIN_PHOSPHATASE_ACTIVITY, GOBP_REGULATION_OF_MYOSIN_LIGHT_CHAIN_PHOSPHATASE_ACTIVITY
                                                                                                                            SIG_IL4RECEPTOR_IN_B_LYPHOCYTES, SIG_IL4RECEPTOR_IN_B_LYPHOCYTES
                                                                                                                           GOBP_NEGATIVE_REGULATION_OF_PROTEIN_LOCALIZATION_TO_MEMBRANE, GOBP_NEGATIVE_REGULATION_OF_PROTEIN_LOCALIZATION_TO_MEMBRANE
                                                                                                                           GOBP_REGULATION_OF_ASPARTIC_TYPE_PEPTIDASE_ACTIVITY, GOBP_REGULATION_OF_ASPARTIC_TYPE_PEPTIDASE_ACTIVITY
                                                                                                                           HOEGERKORP_CD44_TARGETS_TEMPORAL_UP, HOEGERKORP_CD44_TARGETS_TEMPORAL_UP
                                                                                                                           GOBP_POSITIVE_REGULATION_OF_CENTRIOLE_REPLICATION, GOBP_POSITIVE_REGULATION_OF_CENTRIOLE_REPLICATION
                                                                                                                           GOBP_REGULATION_OF_CENTROMERE_COMPLEX_ASSEMBLY, GOBP_REGULATION_OF_CENTROMERE_COMPLEX_ASSEMBLY
                                                                                                                           HP_HEMOPTYSIS, HP_HEMOPTYSIS
                                                                                                                           REACTOME_COMPETING_ENDOGENOUS_RNAS_CERNAS_REGULATE_PTEN_TRANSLATION, REACTOME_COMPETING_ENDOGENOUS_RNAS_CERNAS_REGULATE_PTEN_TRANSLATION
                                                                                                                            REACTOME_SIGNALING_BY_TYPE_1_INSULIN_LIKE_GROWTH_FACTOR_1_RECEPTOR_IGF1R, REACTOME_SIGNALING_BY_TYPE_1_INSULIN_LIKE_GROWTH_FACTOR_1_RECEPTOR_IGF1R
                                                                                                                            REACTOME_CASPASE_ACTIVATION_VIA_DEPENDENCE_RECEPTORS_IN_THE_ABSENCE_OF_LIGAND, REACTOME_CASPASE_ACTIVATION_VIA_DEPENDENCE_RECEPTORS_IN_THE_ABSENCE_OF_LIGAND
                                                                                                                            GOBP_HISTONE_H4_K5_ACETYLATION, GOBP_HISTONE_H4_K5_ACETYLATION
                                                                                                                            WP_TYPE_III_INTERFERON_SIGNALING, WP_TYPE_III_INTERFERON_SIGNALING
                                                                                                                            GOBP_RESPONSE_TO_HISTAMINE, GOBP_RESPONSE_TO_HISTAMINE
                                                                                                                            WP_NOTCH_SIGNALING, WP_NOTCH_SIGNALING
                                                                                                                            GOMF_PROTEIN_DISULFIDE_OXIDOREDUCTASE_ACTIVITY, GOMF_PROTEIN_DISULFIDE_OXIDOREDUCTASE_ACTIVITY
                                                                                                                            FRANCO_BLOOD_SANOFI_PASTEUR_SA_INACTIVATED_INFLUENZA_VACCINE_CORRELATED_WITH_ANTIBODY_RESPONSE_AGE_18_40YO_1DY_NEGATIVE, FRANCO_BLOOD_SANOFI_PASTEUR_SA_INACTIVATED_INFLUENZA_VACCINE_CORRELATED_WITH_ANTIBODY_
                                                                                                                            GOBP_RESPONSE_TO_LIGHT_INTENSITY, GOBP_RESPONSE_TO_LIGHT_INTENSITY
                                                                                                                            GOBP REGULATION OF PROTEIN LOCALIZATION TO CELL SURFACE, GOBP REGULATION OF PROTEIN LOCALIZATION TO CELL SURFACE
                                                                                                                            HP_ABNORMALITY_OF_THE_GASTRIC_MUCOSA, HP_ABNORMALITY_OF_THE_GASTRIC_MUCOSA
                                                                                                                            GOBP_REGULATION_OF_CHROMATIN_ASSEMBLY, GOBP_REGULATION_OF_CHROMATIN_ASSEMBLY
                                                                                                                            HOEK_MYELOID_DENDRITIC_CELL_2011_2012_TIV_ADULT_7DY_DN, HOEK_MYELOID_DENDRITIC_CELL_2011_2012_TIV_ADULT_7DY_DN
                                                                                                                            GOBP_RESPONSE_TO_COBALT_ION, GOBP_RESPONSE_TO_COBALT_ION
                                                                                                                            HP_CYSTIC_LIVER_DISEASE, HP_CYSTIC_LIVER_DISEASE
                                                                                                                           GOBP_NEGATIVE_REGULATION_OF_CENTRIOLE_REPLICATION, GOBP_NEGATIVE_REGULATION_OF_CENTRIOLE_REPLICATION
                                                                                                                           HP_ABNORMAL_DELAYED_HYPERSENSITIVITY_SKIN_TEST, HP_ABNORMAL_DELAYED_HYPERSENSITIVITY_SKIN_TEST
                                                                                                                            chr8q13, chr8q13
                                                                                                                           GOBP_PIRNA_BIOSYNTHETIC_PROCESS, GOBP_PIRNA_BIOSYNTHETIC_PROCESS
                                                                                                                            HP_ENLARGED_TONSILS, HP_ENLARGED_TONSILS
                                                                                                                            HP_INCREASED_C_PEPTIDE_LEVEL, HP_INCREASED_C_PEPTIDE_LEVEL
                                                                                                                            CAO_BLOOD_FLUMIST_AGE_05_14YO_1DY_DN, CAO_BLOOD_FLUMIST_AGE_05_14YO_1DY_DN
                                                                                                                            GOBP_REGULATION_OF_GLYCOGEN_METABOLIC_PROCESS, GOBP_REGULATION_OF_GLYCOGEN_METABOLIC_PROCESS
                                                                                                                            MIR23A_5P, MIR23A_5P
                                                                                                                           HP_NEUROINFLAMMATION, HP_NEUROINFLAMMATION
                                                                                                                            GOBP_DOSAGE_COMPENSATION, GOBP_DOSAGE_COMPENSATION
                                                                                                                            GOBP_REGULATION_OF_POLYSACCHARIDE_METABOLIC_PROCESS, GOBP_REGULATION_OF_POLYSACCHARIDE_METABOLIC_PROCESS
                                                                                                                            REACTOME_INSULIN_RECEPTOR_SIGNALLING_CASCADE, REACTOME_INSULIN_RECEPTOR_SIGNALLING_CASCADE
                                                                                                                            HP_ABNORMAL_CIRCULATING_ACETYLCARNITINE_CONCENTRATION, HP_ABNORMAL_CIRCULATING_ACETYLCARNITINE_CONCENTRATION
                                                                                                                            REACTOME_TRIF_MEDIATED_PROGRAMMED_CELL_DEATH, REACTOME_TRIF_MEDIATED_PROGRAMMED_CELL_DEATH
                                                                                                                            HP_ORCHITIS, HP_ORCHITIS
                                                                                                                            XU_RESPONSE_TO_TRETINOIN_DN, XU_RESPONSE_TO_TRETINOIN_DN
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GOBP_MICROTUBULE_SEVERING, GOBP_MICROTUBULE_SEVERING

HP LARGE FORAMEN MAGNUM, HP LARGE FORAMEN MAGNUM

ONDER_CDH1_TARGETS_3_UP, ONDER_CDH1_TARGETS_3_UP

DORSAM_HOXA9_TARGETS_DN, DORSAM_HOXA9_TARGETS_DN

PID_PTP1B_PATHWAY, PID_PTP1B_PATHWAY

GOMF_PROTEIN_KINASE_B_BINDING, GOMF_PROTEIN_KINASE_B_BINDING

HP_ABNORMALITY_OF_THE_ANTIHELIX, HP_ABNORMALITY_OF_THE_ANTIHELIX

HAY_BONE_MARROW_CD34_POS_ERP_EARLY, HAY_BONE_MARROW_CD34_POS_ERP_EARLY

BUCKANOVICH_T_LYMPHOCYTE_HOMING_ON_TUMOR_DN, BUCKANOVICH_T_LYMPHOCYTE_HOMING_ON_TUMOR_DN

GOBP_REGULATION_OF_ENDOTHELIAL_CELL_DIFFERENTIATION, GOBP_REGULATION_OF_ENDOTHELIAL_CELL_DIFFERENTIATION

GOBP_REGULATION_OF_ENDOPLASMIC_RETICULUM_TUBULAR_NETWORK_ORGANIZATION, GOBP_REGULATION_OF_ENDOPLASMIC_RETICULUM_TUBULAR_NETWORK_ORGANIZATION