```
GSE46606_UNSTIM_VS_CD40L_IL2_IL5_1DAY_STIMULATED_IRF4_KO_BCELL_UP, GSE46606_UNSTIM_VS_CD40L_IL2_IL5_1DAY_STIMULATED_IRF4_KO_BCELL_UP
                                                                                                                             GSE22886_CD8_VS_CD4_NAIVE_TCELL_UP, GSE22886_CD8_VS_CD4_NAIVE_TCELL_UP
                                                                                                                             GSE2770 TGFB AND IL4 ACT VS ACT CD4 TCELL 48H UP, GSE2770 TGFB AND IL4 ACT VS ACT CD4 TCELL 48H UP
                                                                                                                             GSE22140_HEALTHY_VS_ARTHRITIC_GERMFREE_MOUSE_CD4_TCELL_DN, GSE22140_HEALTHY_VS_ARTHRITIC_GERMFREE_MOUSE_CD4_TCELL_DN
                                                                                                                             GSE41176_WT_VS_TAK1_KO_ANTI_IGM_STIM_BCELL_6H_DN, GSE41176_WT_VS_TAK1_KO_ANTI_IGM_STIM_BCELL_6H_DN
                                                                                                                             GSE29618_BCELL_VS_MDC_DAY7_FLU_VACCINE_DN, GSE29618_BCELL_VS_MDC_DAY7_FLU_VACCINE_DN
                                                                                                                             GSE19401_NAIVE_VS_IMMUNIZED_MOUSE_PLN_FOLLICULAR_DC_UP, GSE19401_NAIVE_VS_IMMUNIZED_MOUSE_PLN_FOLLICULAR_DC_UP
                                                                                                                             GSE36826 WT VS IL1R KO SKIN DN, GSE36826 WT VS IL1R KO SKIN DN
                                                                                                                             GSE5099_MONOCYTE_VS_CLASSICAL_M1_MACROPHAGE_DN, GSE5099_MONOCYTE_VS_CLASSICAL_M1_MACROPHAGE_DN
                                                                                                                             GSE2770_IL12_AND_TGFB_VS_IL4_TREATED_ACT_CD4_TCELL_2H_UP, GSE2770_IL12_AND_TGFB_VS_IL4_TREATED_ACT_CD4_TCELL_2H_UP
                                                                                                                             GSE2770_IL12_AND_TGFB_ACT_VS_ACT_CD4_TCELL_2H_UP, GSE2770_IL12_AND_TGFB_ACT_VS_ACT_CD4_TCELL_2H_UP
                                                                                                                             GSE36826_NORMAL_VS_STAPH_AUREUS_INF_SKIN_UP, GSE36826_NORMAL_VS_STAPH_AUREUS_INF_SKIN_UP
                                                                                                                             GSE1925_CTRL_VS_3H_IFNG_STIM_MACROPHAGE_UP, GSE1925_CTRL_VS_3H_IFNG_STIM_MACROPHAGE_UP
                                                                                                                             GSE45739_NRAS_KO_VS_WT_UNSTIM_CD4_TCELL_UP, GSE45739_NRAS_KO_VS_WT_UNSTIM_CD4_TCELL_UP
                                                                                                                             GSE1925_CTRL_VS_IFNG_PRIMED_MACROPHAGE_DN, GSE1925_CTRL_VS_IFNG_PRIMED_MACROPHAGE_DN
                                                                                                                             GSE3039_ALPHABETA_CD8_TCELL_VS_B1_BCELL_DN, GSE3039_ALPHABETA_CD8_TCELL_VS_B1_BCELL_DN
                                                                                                                             GSE29949_MICROGLIA_BRAIN_VS_MONOCYTE_BONE_MARROW_DN, GSE29949_MICROGLIA_BRAIN_VS_MONOCYTE_BONE_MARROW_DN
                                                                                                                             GSE360_DC_VS_MAC_UP, GSE360_DC_VS_MAC_UP
                                                                                                                             GSE17974_CTRL_VS_ACT_IL4_AND_ANTI_IL12_6H_CD4_TCELL_DN, GSE17974_CTRL_VS_ACT_IL4_AND_ANTI_IL12_6H_CD4_TCELL_DN
                                                                                                                             GSE360_T_GONDII_VS_B_MALAYI_HIGH_DOSE_MAC_UP, GSE360_T_GONDII_VS_B_MALAYI_HIGH_DOSE_MAC_UP
                                                                                                                             GSE1432_CTRL_VS_IFNG_24H_MICROGLIA_UP, GSE1432_CTRL_VS_IFNG_24H_MICROGLIA_UP
                                                                                                                             GSE11961_MARGINAL_ZONE_BCELL_VS_MEMORY_BCELL_DAY40_DN, GSE11961_MARGINAL_ZONE_BCELL_VS_MEMORY_BCELL_DAY40_DN
                                                                                                                             GOBP_RIBOSE_PHOSPHATE_BIOSYNTHETIC_PROCESS, GOBP_RIBOSE_PHOSPHATE_BIOSYNTHETIC_PROCESS
                                                                                                                             GSE339_EX_VIVO_VS_IN_CULTURE_CD4POS_DC_DN, GSE339_EX_VIVO_VS_IN_CULTURE_CD4POS_DC_DN
                                                                                                                             GSE24726 WT VS E2 2 KO PDC DN, GSE24726 WT VS E2 2 KO PDC DN
                                                                                                                             GSE360_L_MAJOR_VS_B_MALAYI_LOW_DOSE_DC_DN, GSE360_L_MAJOR_VS_B_MALAYI_LOW_DOSE_DC_DN
                                                                                                                             GSE42088_UNINF_VS_LEISHMANIA_INF_DC_24H_DN, GSE42088_UNINF_VS_LEISHMANIA_INF_DC_24H_DN
                                                                                                                             GSE7509_DC_VS_MONOCYTE_DN, GSE7509_DC_VS_MONOCYTE_DN
                                                                                                                             GSE36392_TYPE_2_MYELOID_VS_EOSINOPHIL_IL25_TREATED_LUNG_DN, GSE36392_TYPE_2_MYELOID_VS_EOSINOPHIL_IL25_TREATED_LUNG_DN
                                                                                                                             GSE1925_CTRL_VS_IFNG_PRIMED_MACROPHAGE_24H_IFNG_STIM_DN, GSE1925_CTRL_VS_IFNG_PRIMED_MACROPHAGE_24H_IFNG_STIM_DN
                                                                                                                             GSE360_HIGH_VS_LOW_DOSE_B_MALAYI_MAC_UP, GSE360_HIGH_VS_LOW_DOSE_B_MALAYI_MAC_UP
                                                                                                                             GSE45881_CXCR6HI_VS_CXCR1LO_COLONIC_LAMINA_PROPRIA_DN, GSE45881_CXCR6HI_VS_CXCR1LO_COLONIC_LAMINA_PROPRIA_DN
                                                                                                                             GSE15330_HSC_VS_LYMPHOID_PRIMED_MULTIPOTENT_PROGENITOR_IKAROS_KO_DN, GSE15330_HSC_VS_LYMPHOID_PRIMED_MULTIPOTENT_PROGENITOR_IKAROS_KO_DN
                                                                                                                             HP_ABNORMALITY_OF_THE_LYMPH_NODES, HP_ABNORMALITY_OF_THE_LYMPH_NODES
                                                                                                                             GSE37301_COMMON_LYMPHOID_PROGENITOR_VS_CD4_TCELL_UP, GSE37301_COMMON_LYMPHOID_PROGENITOR_VS_CD4_TCELL_UP
                                                                                                                             GSE29618_PRE_VS_DAY7_POST_TIV_FLU_VACCINE_MDC_DN, GSE29618_PRE_VS_DAY7_POST_TIV_FLU_VACCINE_MDC_DN
                                                                                                                             FERNANDEZ_BOUND_BY_MYC, FERNANDEZ_BOUND_BY_MYC
                                                                                                                             GSE32034 UNTREATED VS ROSIGLIZATONE TREATED LY6C HIGH MONOCYTE UP, GSE32034 UNTREATED VS ROSIGLIZATONE TREATED LY6C HIGH MONOCYTE UP
                                                                                                                             REACTOME_TOLL_LIKE_RECEPTOR_CASCADES, REACTOME_TOLL_LIKE_RECEPTOR_CASCADES
                                                                                                                             HP HYPOPIGMENTATION OF THE SKIN, HP HYPOPIGMENTATION OF THE SKIN
                                                                                                                             GSE17974 IL4_AND_ANTI_IL12_VS_UNTREATED_48H_ACT_CD4_TCELL_UP, GSE17974_IL4_AND_ANTI_IL12_VS_UNTREATED_48H_ACT_CD4_TCELL_UP
                                                                                                                             GSE11961 FOLLICULAR BCELL VS PLASMA CELL DAY7 UP, GSE11961 FOLLICULAR BCELL VS PLASMA CELL DAY7 UP
                                                                                                                             ZHENG CORD BLOOD C2 PUTATIVE BASOPHIL EOSINOPHIL MAST CELL PROGENITOR, ZHENG CORD BLOOD C2 PUTATIVE BASOPHIL EOSINOPHIL MAST CELL PROGENITOR
                                                                                                                             QI_HYPOXIA, QI_HYPOXIA
                                                                                                                             GSE41978_WT_VS_ID2_KO_KLRG1_LOW_EFFECTOR_CD8_TCELL_DN, GSE41978_WT_VS_ID2_KO_KLRG1_LOW_EFFECTOR_CD8_TCELL_DN
                                                                                                                             GSE46606_IRF4HIGH_VS_WT_CD40L_IL2_IL5_DAY3_STIMULATED_BCELL_DN, GSE46606_IRF4HIGH_VS_WT_CD40L_IL2_IL5_DAY3_STIMULATED_BCELL_DN
                                                                                                                             GSE41978_ID2_KO_VS_BIM_KO_KLRG1_LOW_EFFECTOR_CD8_TCELL_DN, GSE41978_ID2_KO_VS_BIM_KO_KLRG1_LOW_EFFECTOR_CD8_TCELL_DN
                                                                                                                             GOBP_POSITIVE_REGULATION_OF_PEPTIDASE_ACTIVITY, GOBP_POSITIVE_REGULATION_OF_PEPTIDASE_ACTIVITY
                                                                                                                             GOBP_POSITIVE_REGULATION_OF_CYSTEINE_TYPE_ENDOPEPTIDASE_ACTIVITY, GOBP_POSITIVE_REGULATION_OF_CYSTEINE_TYPE_ENDOPEPTIDASE_ACTIVITY
                                                                                                                             GSE360_T_GONDII_VS_B_MALAYI_LOW_DOSE_DC_UP, GSE360_T_GONDII_VS_B_MALAYI_LOW_DOSE_DC_UP
                                                                                                                             GOBP_ALPHA_AMINO_ACID_METABOLIC_PROCESS, GOBP_ALPHA_AMINO_ACID_METABOLIC_PROCESS
                                                                                                                             CYCLIN D1 KE .V1 UP, CYCLIN D1 KE .V1 UP
                                                                                                                             GSE360_DC_VS_MAC_M_TUBERCULOSIS_UP, GSE360_DC_VS_MAC_M_TUBERCULOSIS_UP
                                                                                                                             GSE28130_ACTIVATED_VS_INDUCEED_TREG_UP, GSE28130_ACTIVATED_VS_INDUCEED_TREG_UP
                                                                                                                             GALINDO_IMMUNE_RESPONSE_TO_ENTEROTOXIN, GALINDO_IMMUNE_RESPONSE_TO_ENTEROTOXIN
                                                                                                                             GSE360_L_DONOVANI_VS_L_MAJOR_DC_UP, GSE360_L_DONOVANI_VS_L_MAJOR_DC_UP
                                                                                                                             FLETCHER_PBMC_BCG_10W_INFANT_BCG_STIMULATED_VS_UNSTIMULATED_10W_UP, FLETCHER_PBMC_BCG_10W_INFANT_BCG_STIMULATED_VS_UNSTIMULATED_10W_UP
                                                                                                                             LU_AGING_BRAIN_DN, LU_AGING_BRAIN_DN
                                                                                                                             HP_RECURRENT_FRACTURES, HP_RECURRENT_FRACTURES
                                                                                                                             GGCNRNWCTTYS_UNKNOWN, GGCNRNWCTTYS_UNKNOWN
                                                                                                                             MIR6133, MIR6133
                                                                                                                             GOBP_NUCLEOBASE_CONTAINING_SMALL_MOLECULE_BIOSYNTHETIC_PROCESS, GOBP_NUCLEOBASE_CONTAINING_SMALL_MOLECULE_BIOSYNTHETIC_PROCESS
                                                                                                                             MIR6129, MIR6129
                                                                                                                             GSE45365_WT_VS_IFNAR_KO_BCELL_UP, GSE45365_WT_VS_IFNAR_KO_BCELL_UP
                                                                                                                             REACTOME_DUAL_INCISION_IN_GG_NER, REACTOME_DUAL_INCISION_IN_GG_NER
                                                                                                                             HP_INCREASED_BONE_MINERAL_DENSITY, HP_INCREASED_BONE_MINERAL_DENSITY
                                                                                                                             MIR6130, MIR6130
                                                                                                                             GSE22501_PERIPHERAL_BLOOD_VS_CORD_BLOOD_TREG_DN, GSE22501_PERIPHERAL_BLOOD_VS_CORD_BLOOD_TREG_DN
                                                                                                                             MIR4510, MIR4510
                                                                                                                             MIR600, MIR600
                                                                                                                             ZHAN_MULTIPLE_MYELOMA_UP, ZHAN_MULTIPLE_MYELOMA_UP
                                                                                                                             GOBP_GLYCOSYL_COMPOUND_METABOLIC_PROCESS, GOBP_GLYCOSYL_COMPOUND_METABOLIC_PROCESS
                                                                                                                             GSE9650_EFFECTOR_VS_EXHAUSTED_CD8_TCELL_DN, GSE9650_EFFECTOR_VS_EXHAUSTED_CD8_TCELL_DN
                                                                                                                             MENON_FETAL_KIDNEY_6_COLLECTING_DUCT_CELLS, MENON_FETAL_KIDNEY_6_COLLECTING_DUCT_CELLS
                                                                                                                             REACTOME_NUCLEOTIDE_BINDING_DOMAIN_LEUCINE_RICH_REPEAT_CONTAINING_RECEPTOR_NLR_SIGNALING_PATHWAYS, REACTOME_NUCLEOTIDE_BINDING_DOMAIN_LEUCINE_RICH_REPEAT_CONTAINING_RECEPTOR_NLF
                                                                                                                             GOBP_NUCLEOSIDE_METABOLIC_PROCESS, GOBP_NUCLEOSIDE_METABOLIC_PROCESS
                                                                                                                             REACTOME_TRANSLESION_SYNTHESIS_BY_Y_FAMILY_DNA_POLYMERASES_BYPASSES_LESIONS_ON_DNA_TEMPLATE, REACTOME_TRANSLESION_SYNTHESIS_BY_Y_FAMILY_DNA_POLYMERASES_BYPASSES_LESIONS_ON_DNA_TEMPLATE
                                                                                                                             REACTOME_TRANSCRIPTIONAL_REGULATION_OF_WHITE_ADIPOCYTE_DIFFERENTIATION, REACTOME_TRANSCRIPTIONAL_REGULATION_OF_WHITE_ADIPOCYTE_DIFFERENTIATION
                                                                                                                             GOBP ACTIVATION OF CYSTEINE TYPE ENDOPEPTIDASE ACTIVITY INVOLVED IN APOPTOTIC PROCESS, GOBP ACTIVATION OF CYSTEINE TYPE ENDOPEPTIDASE ACTIVITY INVOLVED IN APOPTOTIC PROCESS
                                                                                                                             GSE9650_NAIVE_VS_EXHAUSTED_CD8_TCELL_DN, GSE9650_NAIVE_VS_EXHAUSTED_CD8_TCELL_DN
                                                                                                                             GOBP_DNA_SYNTHESIS_INVOLVED_IN_DNA_REPAIR, GOBP_DNA_SYNTHESIS_INVOLVED_IN_DNA_REPAIR
                                                                                                                             WP_APOPTOSIS, WP_APOPTOSIS
                                                                                                                             GOBP_TRANSLESION_SYNTHESIS, GOBP_TRANSLESION_SYNTHESIS
                                                                                                                             LE EGR2 TARGETS DN, LE EGR2 TARGETS DN
                                                                                                                             REACTOME_N_GLYCAN_TRIMMING_IN_THE_ER_AND_CALNEXIN_CALRETICULIN_CYCLE, REACTOME_N_GLYCAN_TRIMMING_IN_THE_ER_AND_CALNEXIN_CALRETICULIN_CYCLE
                                                                                                                             GOBP NUCLEOTIDE EXCISION REPAIR DNA INCISION, GOBP NUCLEOTIDE EXCISION REPAIR DNA INCISION
                                                                                                                             GATA2_01, GATA2_01
                                                                                                                             TSENG_IRS1_TARGETS_DN, TSENG_IRS1_TARGETS_DN
                                                                                                                             GOBP_NUCLEOSIDE_PHOSPHATE_CATABOLIC_PROCESS, GOBP_NUCLEOSIDE_PHOSPHATE_CATABOLIC_PROCESS
                                                                                                                             MIR4709_5P, MIR4709_5P
                                                                                                                              TCTGGAC MIR198, TCTGGAC MIR198
                                                                                                                             GOBP_ALPHA_BETA_T_CELL_ACTIVATION, GOBP_ALPHA_BETA_T_CELL_ACTIVATION
                                                                                                                             TRAVAGLINI_LUNG_ALVEOLAR_EPITHELIAL_TYPE_2_CELL, TRAVAGLINI_LUNG_ALVEOLAR_EPITHELIAL_TYPE_2_CELL
                                                                                                                             REACTOME GAP FILLING DNA REPAIR SYNTHESIS AND LIGATION IN GG NER, REACTOME GAP FILLING DNA REPAIR SYNTHESIS AND LIGATION IN GG NER
                                                                                                                             GSE28783_ANTI_MIR33_VS_CTRL_ATHEROSCLEROSIS_MACROPHAGE_UP, GSE28783_ANTI_MIR33_VS_CTRL_ATHEROSCLEROSIS_MACROPHAGE_UP
                                                                                                                              MIR6851_5P, MIR6851_5P
                                                                                                                             WP_TCELL_ANTIGEN_RECEPTOR_TCR_SIGNALING_PATHWAY, WP_TCELL_ANTIGEN_RECEPTOR_TCR_SIGNALING_PATHWAY
                                                                                                                             HP_OPISTHOTONUS, HP_OPISTHOTONUS
                                                                                                                             GOBP_NUCLEOTIDE_EXCISION_REPAIR_DNA_GAP_FILLING, GOBP_NUCLEOTIDE_EXCISION_REPAIR_DNA_GAP_FILLING
                                                                                                                             HP_ABNORMAL_GLYCOSYLATION, HP_ABNORMAL_GLYCOSYLATION
                                                                                                                             GOBP_RRNA_TRANSCRIPTION, GOBP_RRNA_TRANSCRIPTION
                                                                                                                             MIR3689D, MIR3689D
                                                                                                                             KIM_GASTRIC_CANCER_CHEMOSENSITIVITY, KIM_GASTRIC_CANCER_CHEMOSENSITIVITY
                                                                                                                             PAPASPYRIDONOS_UNSTABLE_ATEROSCLEROTIC_PLAQUE_UP, PAPASPYRIDONOS_UNSTABLE_ATEROSCLEROTIC_PLAQUE_UP
                                                                                                                             HP DEATH IN CHILDHOOD, HP DEATH IN CHILDHOOD
                                                                                                                             GOBP_PURINE_NUCLEOSIDE_METABOLIC_PROCESS, GOBP_PURINE_NUCLEOSIDE_METABOLIC_PROCESS
                                                                                                                             BECKER_TAMOXIFEN_RESISTANCE_DN, BECKER_TAMOXIFEN_RESISTANCE_DN
                                                                                                                             KIM_MYCN_AMPLIFICATION_TARGETS_UP, KIM_MYCN_AMPLIFICATION_TARGETS_UP
                                                                                                                             GOBP_REGULATION_OF_T_CELL_DIFFERENTIATION, GOBP_REGULATION_OF_T_CELL_DIFFERENTIATION
                                                                                                                            HP_ABNORMAL_PROTEIN_GLYCOSYLATION, HP_ABNORMAL_PROTEIN_GLYCOSYLATION
                                                                                                                            GOBP_ERROR_PRONE_TRANSLESION_SYNTHESIS, GOBP_ERROR_PRONE_TRANSLESION_SYNTHESIS
                                                                                                                            HP_ABNORMAL_TONGUE_PHYSIOLOGY, HP_ABNORMAL_TONGUE_PHYSIOLOGY
                                                                                                                            HP_ADDUCTED_THUMB, HP_ADDUCTED_THUMB
                                                                                                                            GSE9946_MATURE_STIMULATORY_VS_LISTERIA_INF_MATURE_DC_DN, GSE9946_MATURE_STIMULATORY_VS_LISTERIA_INF_MATURE_DC_DN
                                                                                                                            CTCNANGTGNY_UNKNOWN, CTCNANGTGNY_UNKNOWN
                                                                                                                             GOBP_CELLULAR_AMINO_ACID_CATABOLIC_PROCESS, GOBP_CELLULAR_AMINO_ACID_CATABOLIC_PROCESS
                                                                                                                             WESTON_VEGFA_TARGETS_3HR, WESTON_VEGFA_TARGETS_3HR
                                                                                                                             GOBP_INTERFERON_GAMMA_PRODUCTION, GOBP_INTERFERON_GAMMA_PRODUCTION
                                                                                                                              HARRIS_HYPOXIA, HARRIS_HYPOXIA
                                                                                                                              PID_TNF_PATHWAY, PID_TNF_PATHWAY
                                                                                                                              HP_PRURITUS, HP_PRURITUS
                                                                                                                              HP_RELATIVE_MACROCEPHALY, HP_RELATIVE_MACROCEPHALY
                                                                                                                             GOBP_LIPID_STORAGE, GOBP_LIPID_STORAGE
                                                                                                                             OUILLETTE_CLL_13Q14_DELETION_DN, OUILLETTE_CLL_13Q14_DELETION_DN
                                                                                                                              HP_NAIL_DYSTROPHY, HP_NAIL_DYSTROPHY
                                                                                                                              MIR4646_3P, MIR4646_3P
                                                                                                                              MIR1236_5P, MIR1236_5P
                                                                                                                             GOBP_INACTIVATION_OF_MAPK_ACTIVITY, GOBP_INACTIVATION_OF_MAPK_ACTIVITY
                                                                                                                             REACTOME_PURINERGIC_SIGNALING_IN_LEISHMANIASIS_INFECTION, REACTOME_PURINERGIC_SIGNALING_IN_LEISHMANIASIS_INFECTION
                                                                                                                             HP_NEPHROPATHY, HP_NEPHROPATHY
                                                                                                                            GOBP_POSITIVE_REGULATION_OF_INTERFERON_GAMMA_PRODUCTION, GOBP_POSITIVE_REGULATION_OF_INTERFERON_GAMMA_PRODUCTION
CAVITY_B1A_BCELL_VS_SPLEEN_BCELL_DN, GSE23114_PERITONEAL_CAVITY_B1A_BCELL_VS_SPLEEN_BCELL_DN
                                                                                                                              HALLMARK_IL6_JAK_STAT3_SIGNALING, HALLMARK_IL6_JAK_STAT3_SIGNALING
                                                                                                                              HP_SEVERE_COMBINED_IMMUNODEFICIENCY, HP_SEVERE_COMBINED_IMMUNODEFICIENCY
                                                                                                                              REACTOME_REGULATION_OF_TNFR1_SIGNALING, REACTOME_REGULATION_OF_TNFR1_SIGNALING
                                                                                                                              HP_EPISODIC_HYPERHIDROSIS, HP_EPISODIC_HYPERHIDROSIS
                                                                                                                              MIR6888_5P, MIR6888_5P
                                                                                                                              IWANAGA_CARCINOGENESIS_BY_KRAS_DN, IWANAGA_CARCINOGENESIS_BY_KRAS_DN
                                                                                                                              SHAFFER_IRF4_MULTIPLE_MYELOMA_PROGRAM, SHAFFER_IRF4_MULTIPLE_MYELOMA_PROGRAM
                                                                                                                              HP_CELLULAR_IMMUNODEFICIENCY, HP_CELLULAR_IMMUNODEFICIENCY
                                                                                                                              QI_HYPOXIA_TARGETS_OF_HIF1A_AND_FOXA2, QI_HYPOXIA_TARGETS_OF_HIF1A_AND_FOXA2
                                                                                                                             GOBP_REGULATION_OF_CELL_KILLING, GOBP_REGULATION_OF_CELL_KILLING
                                                                                                                              GOBP_ALPHA_AMINO_ACID_CATABOLIC_PROCESS, GOBP_ALPHA_AMINO_ACID_CATABOLIC_PROCESS
                                                                                                                              GOBP_CELLULAR_EXTRAVASATION, GOBP_CELLULAR_EXTRAVASATION
                                                                                                                              BIOCARTA_DEATH_PATHWAY, BIOCARTA_DEATH_PATHWAY
                                                                                                                              PID_HIV_NEF_PATHWAY, PID_HIV_NEF_PATHWAY
                                                                                                                             BIOCARTA_TNFR1_PATHWAY, BIOCARTA_TNFR1_PATHWAY
                                                                                                                             HP_MORPHOLOGICAL_ABNORMALITY_OF_THE_CORTICOSPINAL_TRACT, HP_MORPHOLOGICAL_ABNORMALITY_OF_THE_CORTICOSPINAL_TRACT
                                                                                                                             GOBP_POSITIVE_REGULATION_OF_TUMOR_NECROSIS_FACTOR_SUPERFAMILY_CYTOKINE_PRODUCTION, GOBP_POSITIVE_REGULATION_OF_TUMOR_NECROSIS_FACTOR_SUPERFAMILY_CYTOKINE_PRODUCTION
                                                                                                                             MODULE_265, MODULE_265
                                                                                                                            GOBP_PLACENTA_DEVELOPMENT, GOBP_PLACENTA_DEVELOPMENT
                                                                                                                             GOBP_RIBONUCLEOTIDE_CATABOLIC_PROCESS, GOBP_RIBONUCLEOTIDE_CATABOLIC_PROCESS
                                                                                                                             CYCLIN_D1_KE_.V1_DN, CYCLIN_D1_KE_.V1_DN
                                                                                                                             GOBP_REGULATION_OF_OXIDATIVE_PHOSPHORYLATION, GOBP_REGULATION_OF_OXIDATIVE_PHOSPHORYLATION
                                                                                                                             HP SUPRANUCLEAR GAZE PALSY, HP SUPRANUCLEAR GAZE PALSY
                                                                                                                             MODULE_138, MODULE_138
                                                                                                                             HP IMPAIRED SMOOTH PURSUIT, HP IMPAIRED SMOOTH PURSUIT
                                                                                                                             HP_ABNORMAL_METAPHYSEAL_TRABECULATION, HP_ABNORMAL_METAPHYSEAL_TRABECULATION
                                                                                                                             GOBP_CELLULAR_METABOLIC_COMPOUND_SALVAGE, GOBP_CELLULAR_METABOLIC_COMPOUND_SALVAGE
                                                                                                                             GOBP_RESPONSE_TO_TESTOSTERONE, GOBP_RESPONSE_TO_TESTOSTERONE
                                                                                                                             GOBP CELL KILLING, GOBP CELL KILLING
                                                                                                                             WP_UREA_CYCLE_AND_METABOLISM_OF_AMINO_GROUPS, WP_UREA_CYCLE_AND_METABOLISM_OF_AMINO_GROUPS
                                                                                                                             MIR6085, MIR6085
                                                                                                                             GOBP_T_CELL_MEDIATED_CYTOTOXICITY, GOBP_T_CELL_MEDIATED_CYTOTOXICITY
                                                                                                                             KYNG DNA DAMAGE BY GAMMA RADIATION, KYNG DNA DAMAGE BY GAMMA RADIATION
                                                                                                                             REACTOME_INFLAMMASOMES, REACTOME_INFLAMMASOMES
                                                                                                                             ZHONG_PFC_C8_UNKNOWN_NEUROD2_POS_INTERNEURON, ZHONG_PFC_C8_UNKNOWN_NEUROD2_POS_INTERNEURON
                                                                                                                             GOBP_NUCLEOTIDE_TRANSPORT, GOBP_NUCLEOTIDE_TRANSPORT
                                                                                                                             GOBP_POSITIVE_REGULATION_OF_PRI_MIRNA_TRANSCRIPTION_BY_RNA_POLYMERASE_II, GOBP_POSITIVE_REGULATION_OF_PRI_MIRNA_TRANSCRIPTION_BY_RNA_POLYMERASE_II
                                                                                                                             GSE17974_IL4_AND_ANTI_IL12_VS_UNTREATED_24H_ACT_CD4_TCELL_UP, GSE17974_IL4_AND_ANTI_IL12_VS_UNTREATED_24H_ACT_CD4_TCELL_UP
                                                                                                                              XIE_LT_HSC_S1PR3_OE_UP, XIE_LT_HSC_S1PR3_OE_UP
                                                                                                                             GEISS_RESPONSE_TO_DSRNA_UP, GEISS_RESPONSE_TO_DSRNA_UP
                                                                                                                             GOBP_POLYAMINE_METABOLIC_PROCESS, GOBP_POLYAMINE_METABOLIC_PROCESS
                                                                                                                              MCBRYAN_PUBERTAL_TGFB1_TARGETS_DN, MCBRYAN_PUBERTAL_TGFB1_TARGETS_DN
                                                                                                                             DACOSTA ERCC3 ALLELE XPCS VS TTD DN, DACOSTA ERCC3 ALLELE XPCS VS TTD DN
                                                                                                                             HP_GENERALIZED_HYPOPIGMENTATION_OF_HAIR, HP_GENERALIZED_HYPOPIGMENTATION_OF_HAIR
                                                                                                                             GOBP_REGULATION_OF_BICELLULAR_TIGHT_JUNCTION_ASSEMBLY, GOBP_REGULATION_OF_BICELLULAR_TIGHT_JUNCTION_ASSEMBLY
                                                                                                                              GOBP_REACTIVE_OXYGEN_SPECIES_BIOSYNTHETIC_PROCESS, GOBP_REACTIVE_OXYGEN_SPECIES_BIOSYNTHETIC_PROCESS
                                                                                                                             REACTOME_OVARIAN_TUMOR_DOMAIN_PROTEASES, REACTOME_OVARIAN_TUMOR_DOMAIN_PROTEASES
                                                                                                                             GOBP_RESPONSE_TO_INTERLEUKIN_18, GOBP_RESPONSE_TO_INTERLEUKIN_18
                                                                                                                             WENG POR TARGETS GLOBAL DN, WENG POR TARGETS GLOBAL DN
                                                                                                                             TSENG ADIPOGENIC POTENTIAL DN, TSENG ADIPOGENIC POTENTIAL DN
                                                                                                                             HP_LIMB_GIRDLE_MUSCLE_ATROPHY, HP_LIMB_GIRDLE_MUSCLE_ATROPHY
                                                                                                                             HP_CEREBRAL_EDEMA, HP_CEREBRAL_EDEMA
                                                                                                                             GOBP_POSITIVE_REGULATION_OF_SODIUM_ION_TRANSMEMBRANE_TRANSPORT, GOBP_POSITIVE_REGULATION_OF_SODIUM_ION_TRANSMEMBRANE_TRANSPORT
                                                                                                                             HOWARD_MONOCYTE_INACT_MONOV_INFLUENZA_A_INDONESIA_05_2005_H5N1_AGE_18_49YO_1DY_DN, HOWARD_MONOCYTE_INACT_MONOV_INFLUENZA_A_INDONESIA_05_2005_H5N1_AGE_18_49YO_1DY_DN
                                                                                                                             GOBP PURINE CONTAINING COMPOUND SALVAGE, GOBP PURINE CONTAINING COMPOUND SALVAGE
                                                                                                                             REACTOME_THE_NLRP3_INFLAMMASOME, REACTOME_THE_NLRP3_INFLAMMASOME
                                                                                                                             GOBP_POSITIVE_REGULATION_OF_CELL_KILLING, GOBP_POSITIVE_REGULATION_OF_CELL_KILLING
                                                                                                                             REACTOME_PURINE_SALVAGE, REACTOME_PURINE_SALVAGE
                                                                                                                             REACTOME INSULIN PROCESSING, REACTOME INSULIN PROCESSING
                                                                                                                             WU_HBX_TARGETS_3_UP, WU_HBX_TARGETS_3_UP
                                                                                                                             GOBP_NEGATIVE_REGULATION_OF_WOUND_HEALING, GOBP_NEGATIVE_REGULATION_OF_WOUND_HEALING
                                                                                                                             CAFFAREL_RESPONSE_TO_THC_8HR_3_DN, CAFFAREL_RESPONSE_TO_THC_8HR_3_DN
                                                                                                                             GOMF_CARBON_NITROGEN_LYASE_ACTIVITY, GOMF_CARBON_NITROGEN_LYASE_ACTIVITY
                                                                                                                             DURANTE_ADULT_OLFACTORY_NEUROEPITHELIUM_RESPIRATORY_HORIZONTAL_BASAL_CELLS, DURANTE_ADULT_OLFACTORY_NEUROEPITHELIUM_RESPIRATORY_HORIZONTAL_BASAL_CELLS
                                                                                                                             MIR296_3P, MIR296_3P
                                                                                                                             GOCC_EUKARYOTIC_TRANSLATION_INITIATION_FACTOR_4F_COMPLEX, GOCC_EUKARYOTIC_TRANSLATION_INITIATION_FACTOR_4F_COMPLEX
                                                                                                                             BIOCARTA_MHC_PATHWAY, BIOCARTA_MHC_PATHWAY
                                                                                                                             GOBP_ZYMOGEN_ACTIVATION, GOBP_ZYMOGEN_ACTIVATION
                                                                                                                             LOPES_METHYLATED_IN_COLON_CANCER_DN, LOPES_METHYLATED_IN_COLON_CANCER_DN
                                                                                                                             HP_PELVIC_GIRDLE_MUSCLE_WEAKNESS, HP_PELVIC_GIRDLE_MUSCLE_WEAKNESS
                                                                                                                             GOBP_POLYAMINE_BIOSYNTHETIC_PROCESS, GOBP_POLYAMINE_BIOSYNTHETIC_PROCESS
                                                                                                                             GOBP_INTERLEUKIN_18_MEDIATED_SIGNALING_PATHWAY, GOBP_INTERLEUKIN_18_MEDIATED_SIGNALING_PATHWAY
                                                                                                                             REACTOME_TNFR1_INDUCED_PROAPOPTOTIC_SIGNALING, REACTOME_TNFR1_INDUCED_PROAPOPTOTIC_SIGNALING
                                                                                                                             HP_ESOPHAGEAL_STENOSIS, HP_ESOPHAGEAL_STENOSIS
                                                                                                                             GOBP_PHOSPHATIDYLCHOLINE_ACYL_CHAIN_REMODELING, GOBP_PHOSPHATIDYLCHOLINE_ACYL_CHAIN_REMODELING
                                                                                                                             GOBP CELL PROLIFERATION INVOLVED IN KIDNEY DEVELOPMENT, GOBP CELL PROLIFERATION INVOLVED IN KIDNEY DEVELOPMENT
                                                                                                                             GOBP_POSITIVE_REGULATION_OF_EXTRACELLULAR_MATRIX_ORGANIZATION, GOBP_POSITIVE_REGULATION_OF_EXTRACELLULAR_MATRIX_ORGANIZATION
                                                                                                                             MODULE 73, MODULE 73
                                                                                                                             MODULE_322, MODULE_322
                                                                                                                             MODULE 528, MODULE 528
                                                                                                                             HP_ORAL_LEUKOPLAKIA, HP_ORAL_LEUKOPLAKIA
                                                                                                                             GOMF_MAP_KINASE_PHOSPHATASE_ACTIVITY, GOMF_MAP_KINASE_PHOSPHATASE_ACTIVITY
                                                                                                                             GOBP METAL ION EXPORT, GOBP METAL ION EXPORT
                                                                                                                             GOBP_RESPONSE_TO_NITRIC_OXIDE, GOBP_RESPONSE_TO_NITRIC_OXIDE
                                                                                                                             GOBP_RIBONUCLEOSIDE_MONOPHOSPHATE_CATABOLIC_PROCESS, GOBP_RIBONUCLEOSIDE_MONOPHOSPHATE_CATABOLIC_PROCESS
                                                                                                                             HP_ABNORMALITY_OF_SMALL_INTESTINAL_VILLUS_MORPHOLOGY, HP_ABNORMALITY_OF_SMALL_INTESTINAL_VILLUS_MORPHOLOGY
                                                                                                                             MODULE_78, MODULE_78
                                                                                                                             MODULE_471, MODULE_471
                                                                                                                             COLLIS_PRKDC_REGULATORS, COLLIS_PRKDC_REGULATORS
                                                                                                                             REACTOME_REGULATION_BY_C_FLIP, REACTOME_REGULATION_BY_C_FLIP
                                                                                                                             GOMF_THIOESTERASE_BINDING, GOMF_THIOESTERASE_BINDING
                                                                                                                             GOBP_POSITIVE_REGULATION_OF_DOUBLE_STRAND_BREAK_REPAIR_VIA_HOMOLOGOUS_RECOMBINATION, GOBP_POSITIVE_REGULATION_OF_DOUBLE_STRAND_BREAK_REPAIR_VIA_HOMOLOGOUS_RECOMBINATION
                                                                                                                             MAP2K1_TARGET_GENES, MAP2K1_TARGET_GENES
                                                                                                                             HP_ABNORMALITY_OF_HAND_JOINT_MOBILITY, HP_ABNORMALITY_OF_HAND_JOINT_MOBILITY
                                                                                                                             HP_GENERALIZED_HYPOPIGMENTATION, HP_GENERALIZED_HYPOPIGMENTATION
                                                                                                                             GOMF_NADPLUS_NUCLEOSIDASE_ACTIVITY, GOMF_NADPLUS_NUCLEOSIDASE_ACTIVITY
                                                                                                                             GOBP_CHEMICAL_HOMEOSTASIS_WITHIN_A_TISSUE, GOBP_CHEMICAL_HOMEOSTASIS_WITHIN_A_TISSUE
                                                                                                                             GOBP_POSITIVE_REGULATION_OF_PROTEIN_LOCALIZATION_TO_CELL_SURFACE, GOBP_POSITIVE_REGULATION_OF_PROTEIN_LOCALIZATION_TO_CELL_SURFACE
                                                                                                                             GOBP_HEMATOPOIETIC_STEM_CELL_PROLIFERATION, GOBP_HEMATOPOIETIC_STEM_CELL_PROLIFERATION
                                                                                                                             GOBP_CELLULAR_BIOGENIC_AMINE_METABOLIC_PROCESS, GOBP_CELLULAR_BIOGENIC_AMINE_METABOLIC_PROCESS
                                                                                                                             HP_SKIN_VESICLE, HP_SKIN_VESICLE
                                                                                                                             REACTOME_CASPASE_ACTIVATION_VIA_DEATH_RECEPTORS_IN_THE_PRESENCE_OF_LIGAND, REACTOME_CASPASE_ACTIVATION_VIA_DEATH_RECEPTORS_IN_THE_PRESENCE_OF_LIGAND
                                                                                                                             GOBP_SPERMIDINE_METABOLIC_PROCESS, GOBP_SPERMIDINE_METABOLIC_PROCESS
                                                                                                                             GOBP_ACTIVATION_OF_CYSTEINE_TYPE_ENDOPEPTIDASE_ACTIVITY, GOBP_ACTIVATION_OF_CYSTEINE_TYPE_ENDOPEPTIDASE_ACTIVITY
                                                                                                                             GOBP_REGULATION_OF_PLASMINOGEN_ACTIVATION, GOBP_REGULATION_OF_PLASMINOGEN_ACTIVATION
                                                                                                                             BUCKANOVICH_T_LYMPHOCYTE_HOMING_ON_TUMOR_UP, BUCKANOVICH_T_LYMPHOCYTE_HOMING_ON_TUMOR_UP
                                                                                                                             WP_NANOMATERIAL_INDUCED_APOPTOSIS, WP_NANOMATERIAL_INDUCED_APOPTOSIS
                                                                                                                             SHIN_B_CELL_LYMPHOMA_CLUSTER_3, SHIN_B_CELL_LYMPHOMA_CLUSTER_3
                                                                                                                             MCMURRAY_TP53_HRAS_COOPERATION_RESPONSE_UP, MCMURRAY_TP53_HRAS_COOPERATION_RESPONSE_UP
                                                                                                                             GOBP_LACRIMAL_GLAND_DEVELOPMENT, GOBP_LACRIMAL_GLAND_DEVELOPMENT
                                                                                                                             GOBP_NUCLEOSIDE_MONOPHOSPHATE_CATABOLIC_PROCESS, GOBP_NUCLEOSIDE_MONOPHOSPHATE_CATABOLIC_PROCESS
                                                                                                                             GOMF_CYSTEINE_TYPE_ENDOPEPTIDASE_ACTIVITY_INVOLVED_IN_APOPTOTIC_SIGNALING_PATHWAY, GOMF_CYSTEINE_TYPE_ENDOPEPTIDASE_ACTIVITY_INVOLVED_IN_APOPTOTIC_SIGNALING_PATHWAY
                                                                                                                             GOBP_REGULATION_OF_T_HELPER_1_CELL_DIFFERENTIATION, GOBP_REGULATION_OF_T_HELPER_1_CELL_DIFFERENTIATION
                                                                                                                             GOBP_XENOPHAGY, GOBP_XENOPHAGY
                                                                                                                             ERWIN_COHEN_PBMC_TC_83_AGE_18_45YO_NAIVE_NOT_PREVIOUSLY_IMMUNIZED_24HR_DEG_CANONICAL_PATHWAY_MEMBERS_UP, ERWIN_COHEN PBMC_TC_83_AGE_18_45YO_NAIVE_NOT_PREVIOUSLY_IMMUNIZED_24HR_DEG_CANONICAL_PATHWAY_MEMBERS_UP, ERWIN_COHEN_PBMC_TC_83_AGE_18_45YO_NAIVE_NOT_PREVIOUSLY_IMMUNIZED_24HR_DEG_CANONICAL_PATHWAY_MEMBERS_UP, ERWIN_COHEN_PBMC_TC_83_AGE_18_45YO_NAIVE_NOT_PBMC_TC_83_AGE_18_45YO_NAIVE_NOT_PBMC_TC_83_AGE_18_45YO_NAIVE_NOT_PBMC_TC_83_AGE_18_45YO_NAIVE_NOT_PBMC_TC_83_AGE_18_45YO_NAIVE_NOT_PBMC_TC_83_AGE_18_45YO_NAIVE_NOT_PBMC_TC_83_AGE_18_45YO_NAIVE_NOT_PBMC_TC_83_AGE_18_45YO_NAIVE_NOT_PBMC_TC_83_AGE_18_45YO_NAIVE_NOT_PBMC_TC_83_AGE_18_45YO_NAIVE_NOT_PBMC_TC_83_AGE_18_45YO_NAIVE_NOT_PBMC_TC_84_AGE_18_45YO_NAIVE_NOT_PBMC_TC_84_AGE_18_45YO_NAIVE_NOT_PBMC_TC_84_AGE_18_45YO_NAIVE_NOT_PBMC_TC_84_AGE_18_45YO_NAIVE_NOT_PBMC_TC_84_AGE_18_45YO_NAIVE_NOT_PBMC_TC_84_AGE_18_45YO_NAIVE_NOT_PBMC_TC_84_AGE_18_45YO_NAIVE_NOT_PBMC_TC_84_AGE_18_45YO_NAIVE_NOT_PBMC_TC_84_AGE_18_45YO_NAIVE_NOT_PBMC_TC_84_AGE_18_45YO_NAIVE_NOT_PBMC_TC_84_AGE_18_5YO_NAIVE_NOT_PBMC_TC_84_AGE_18_45YO_NAIVE_NOT_PBMC_TC_84_AGE_1
                                                                                                                             REACTOME_TRAIL_SIGNALING, REACTOME_TRAIL_SIGNALING
                                                                                                                             PID_IL12_STAT4_PATHWAY, PID_IL12_STAT4_PATHWAY
                                                                                                                             CUI_DEVELOPING_HEART_COMPACT_VENTRICULAR_CARDIOMYOCYTE, CUI_DEVELOPING_HEART_COMPACT_VENTRICULAR_CARDIOMYOCYTE
                                                                                                                             HP_HIGH_MYOPIA, HP_HIGH_MYOPIA
                                                                                                                             TSUNODA_CISPLATIN_RESISTANCE_UP, TSUNODA_CISPLATIN_RESISTANCE_UP
                                                                                                                             HOFMANN_MYELODYSPLASTIC_SYNDROM_LOW_RISK_UP, HOFMANN_MYELODYSPLASTIC_SYNDROM_LOW_RISK_UP
                                                                                                                             GOBP_POSITIVE_REGULATION_OF_T_HELPER_1_CELL_DIFFERENTIATION, GOBP_POSITIVE_REGULATION_OF_T_HELPER_1_CELL_DIFFERENTIATION
                                                                                                                             GOBP_INTERLEUKIN_1_BETA_PRODUCTION, GOBP_INTERLEUKIN_1_BETA_PRODUCTION
                                                                                                                             GOBP_NUCLEOSIDE_SALVAGE, GOBP_NUCLEOSIDE_SALVAGE
                                                                                                                             GOBP_POSITIVE_REGULATION_OF_LIPID_STORAGE, GOBP_POSITIVE_REGULATION_OF_LIPID_STORAGE
                                                                                                                             HP_RECURRENT_UPPER_AND_LOWER_RESPIRATORY_TRACT_INFECTIONS, HP_RECURRENT_UPPER_AND_LOWER_RESPIRATORY_TRACT_INFECTIONS
                                                                                                                             GOBP_REGULATION_OF_CELL_PROLIFERATION_INVOLVED_IN_KIDNEY_DEVELOPMENT, GOBP_REGULATION_OF_CELL_PROLIFERATION_INVOLVED_IN_KIDNEY_DEVELOPMENT
                                                                                                                             HP_CEREBRAL_PALSY, HP_CEREBRAL_PALSY
                                                                                                                             HP_ABNORMAL_DELAYED_HYPERSENSITIVITY_SKIN_TEST, HP_ABNORMAL_DELAYED_HYPERSENSITIVITY_SKIN_TEST
                                                                                                                             MODULE_545, MODULE_545
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GOBP_RESPONSE_TO_THYROID_HORMONE, GOBP_RESPONSE_TO_THYROID_HORMONE

ZHONG_PFC_C6_PLXNA4_POS_EXCITATORY_NEURON, ZHONG_PFC_C6_PLXNA4_POS_EXCITATORY_NEURON

GOBP_RESPONSE_TO_INACTIVITY, GOBP_RESPONSE_TO_INACTIVITY

GOMF_LIM_DOMAIN_BINDING, GOMF_LIM_DOMAIN_BINDING

GSE17974_0H_VS_12H_IN_VITRO_ACT_CD4_TCELL_DN, GSE17974_0H_VS_12H_IN_VITRO_ACT_CD4_TCELL_DN

GSE17974 CTRL VS ACT IL4 AND ANTI IL12 4H CD4 TCELL DN, GSE17974 CTRL VS ACT IL4 AND ANTI IL12 4H CD4 TCELL DN

GSE28726_ACT_CD4_TCELL_VS_ACT_VA24NEG_NKTCELL_UP, GSE28726_ACT_CD4_TCELL_VS_ACT_VA24NEG_NKTCELL_UP

GSE26727_WT_VS_KLF2_KO_LPS_STIM_MACROPHAGE_DN, GSE26727_WT_VS_KLF2_KO_LPS_STIM_MACROPHAGE_DN