```
HALLMARK_OXIDATIVE_PHOSPHORYLATION, HALLMARK_OXIDATIVE_PHOSPHORYLATION
                                                                                                                GSE17974_CTRL_VS_ACT_IL4_AND_ANTI_IL12_24H_CD4_TCELL_DN, GSE17974_CTRL_VS_ACT_IL4_AND_ANTI_IL12_24H_CD4_TCELL_DN
                                                                                                                GSE17974_0H_VS_12H_IN_VITRO_ACT_CD4_TCELL_DN, GSE17974_0H_VS_12H_IN_VITRO_ACT_CD4_TCELL_DN
                                                                                                                GSE41867_DAY6_VS_DAY8_LCMV_ARMSTRONG_EFFECTOR_CD8_TCELL_DN, GSE41867_DAY6_VS_DAY8_LCMV_ARMSTRONG_EFFECTOR_CD8_TCELL_DN
                                                                                                                GSE32986_UNSTIM_VS_GMCSF_AND_CURDLAN_HIGHDOSE_STIM_DC_UP, GSE32986_UNSTIM_VS_GMCSF_AND_CURDLAN_HIGHDOSE_STIM_DC_UP
                                                                                                                GO MITOCHONDRIAL MEMBRANE PART, GO MITOCHONDRIAL MEMBRANE PART
                                                                                                                YAO_TEMPORAL_RESPONSE_TO_PROGESTERONE_CLUSTER_13, YAO_TEMPORAL_RESPONSE_TO_PROGESTERONE_CLUSTER_13
                                                                                                               GSE18791_CTRL_VS_NEWCASTLE_VIRUS_DC_4H_UP, GSE18791_CTRL_VS_NEWCASTLE_VIRUS_DC_4H_UP
                                                                                                               GSE27786_BCELL_VS_MONO_MAC_UP, GSE27786_BCELL_VS_MONO_MAC_UP
                                                                                                               GO_MITOCHONDRIAL_TRANSLATION, GO_MITOCHONDRIAL_TRANSLATION
                                                                                                               GSE24634_TREG_VS_TCONV_POST_DAY10_IL4_CONVERSION_UP, GSE24634_TREG_VS_TCONV_POST_DAY10_IL4_CONVERSION_UP
                                                                                                               GSE22033_UNTREATED_VS_ROSIGLITAZONE_TREATED_MEF_UP, GSE22033_UNTREATED_VS_ROSIGLITAZONE_TREATED_MEF_UP
                                                                                                               GSE3982_CENT_MEMORY_CD4_TCELL_VS_TH1_DN, GSE3982_CENT_MEMORY_CD4_TCELL_VS_TH1_DN
                                                                                                               GSE17974_0H_VS_48H_IN_VITRO_ACT_CD4_TCELL_DN, GSE17974_0H_VS_48H_IN_VITRO_ACT_CD4_TCELL_DN
                                                                                                               GSE46606_UNSTIM_VS_CD40L_IL2_IL5_DAY3_STIMULATED_BCELL_DN, GSE46606_UNSTIM_VS_CD40L_IL2_IL5_DAY3_STIMULATED_BCELL_DN
                                                                                                               GSE43863_TH1_VS_LY6C_LOW_CXCR5NEG_EFFECTOR_CD4_TCELL_UP, GSE43863_TH1_VS_LY6C_LOW_CXCR5NEG_EFFECTOR_CD4_TCELL_UP
                                                                                                               REACTOME_TCA_CYCLE_AND_RESPIRATORY_ELECTRON_TRANSPORT, REACTOME_TCA_CYCLE_AND_RESPIRATORY_ELECTRON_TRANSPORT
                                                                                                               GSE3982_BASOPHIL_VS_TH1_DN, GSE3982_BASOPHIL_VS_TH1_DN
                                                                                                               GSE17721_PAM3CSK4_VS_GADIQUIMOD_8H_BMDC_UP, GSE17721_PAM3CSK4_VS_GADIQUIMOD_8H_BMDC_UP
                                                                                                               GO_CELLULAR_PROTEIN_COMPLEX_DISASSEMBLY, GO_CELLULAR_PROTEIN_COMPLEX_DISASSEMBLY
                                                                                                               GSE27786_NKCELL_VS_MONO_MAC_UP, GSE27786_NKCELL_VS_MONO_MAC_UP
                                                                                                               GSE15330_GRANULOCYTE_MONOCYTE_PROGENITOR_VS_PRO_BCELL_UP, GSE15330_GRANULOCYTE_MONOCYTE_PROGENITOR_VS_PRO_BCELL_UP
                                                                                                               GSE17721_POLYIC_VS_PAM3CSK4_16H_BMDC_DN, GSE17721_POLYIC_VS_PAM3CSK4_16H_BMDC_DN
                                                                                                               GO_TRANSLATIONAL_TERMINATION, GO_TRANSLATIONAL_TERMINATION
                                                                                                               GO TRANSLATIONAL ELONGATION, GO TRANSLATIONAL ELONGATION
                                                                                                               GSE17721_PAM3CSK4_VS_GADIQUIMOD_6H_BMDC_UP, GSE17721_PAM3CSK4_VS_GADIQUIMOD_6H_BMDC_UP
                                                                                                               GO_MITOCHONDRIAL_PROTEIN_COMPLEX, GO_MITOCHONDRIAL_PROTEIN_COMPLEX
                                                                                                               GSE1460_INTRATHYMIC_T_PROGENITOR_VS_CD4_THYMOCYTE_UP, GSE1460_INTRATHYMIC_T_PROGENITOR_VS_CD4_THYMOCYTE_UP
                                                                                                               GSE2770_UNTREATED_VS_IL4_TREATED_ACT_CD4_TCELL_2H_DN, GSE2770_UNTREATED_VS_IL4_TREATED_ACT_CD4_TCELL_2H_DN
                                                                                                               MORF_RFC1, MORF_RFC1
                                                                                                               GSE16451_CTRL_VS_WEST_EQUINE_ENC_VIRUS_IMMATURE_NEURON_CELL_LINE_DN, GSE16451_CTRL_VS_WEST_EQUINE_ENC_VIRUS_IMMATURE_NEURON_CELL_LINE_DN
                                                                                                               REACTOME_RESPIRATORY_ELECTRON_TRANSPORT_ATP_SYNTHESIS_BY_CHEMIOSMOTIC_COUPLING_AND_HEAT_PRODUCTION_BY_UNCOUPLING_PROTEINS_, REACTOME_RESPIRATORY_ELECTRON_TRANSPORT_ATP_SYNTHESIS_BY_CHEMIOSMOTIC_COUPLING_PROTEINS_, REACTOME_RESPIRATORY_ELECTRON_TRANSPORT_ATP_SYNTHESIS_BY_CHEMIOSMOTIC_COUPLING_PROTEINS_, REACTOME_RESPIRATORY_ELECTRON_TRANSPORT_ATP_SYNTHESIS_BY_CHEMIOSMOTIC_COUPLING_PROTEINS_
                                                                                                               GSE3982_MAST_CELL_VS_TH2_DN, GSE3982_MAST_CELL_VS_TH2_DN
                                                                                                               IVANOVA_HEMATOPOIESIS_INTERMEDIATE_PROGENITOR, IVANOVA_HEMATOPOIESIS_INTERMEDIATE_PROGENITOR
                                                                                                               BURTON_ADIPOGENESIS_5, BURTON_ADIPOGENESIS_5
                                                                                                               GO_INNER_MITOCHONDRIAL_MEMBRANE_PROTEIN_COMPLEX, GO_INNER_MITOCHONDRIAL_MEMBRANE_PROTEIN_COMPLEX
                                                                                                               GSE17721_0.5H_VS_8H_LPS_BMDC_UP, GSE17721_0.5H_VS_8H_LPS_BMDC_UP
                                                                                                               GSE17721_LPS_VS_POLYIC_16H_BMDC_UP, GSE17721_LPS_VS_POLYIC_16H_BMDC_UP
                                                                                                               MYC_UP.V1_UP, MYC_UP.V1_UP
                                                                                                               GO_ORGANELLAR_RIBOSOME, GO_ORGANELLAR_RIBOSOME
                                                                                                               GSE13522 CTRL VS T CRUZI Y STRAIN INF SKIN IFNG KO UP, GSE13522 CTRL VS T CRUZI Y STRAIN INF SKIN IFNG KO UP
                                                                                                               GSE17721_LPS_VS_POLYIC_8H_BMDC_UP, GSE17721_LPS_VS_POLYIC_8H_BMDC_UP
                                                                                                               LI_DCP2_BOUND_MRNA, LI_DCP2_BOUND_MRNA
                                                                                                               GSE17721_4H_VS_24H_POLYIC_BMDC_UP, GSE17721_4H_VS_24H_POLYIC_BMDC_UP
                                                                                                               GSE21063 WT_VS_NFATC1_KO_3H_ANTI_IGM_STIM_BCELL_DN, GSE21063_WT_VS_NFATC1_KO_3H_ANTI_IGM_STIM_BCELL_DN
                                                                                                              KEGG_ALZHEIMERS_DISEASE, KEGG_ALZHEIMERS_DISEASE
                                                                                                               GO_REPLICATION_FORK, GO_REPLICATION_FORK
                                                                                                               GSE15930_NAIVE_VS_72H_IN_VITRO_STIM_IL12_CD8_TCELL_DN, GSE15930_NAIVE_VS_72H_IN_VITRO_STIM_IL12_CD8_TCELL_DN
                                                                                                               GSE40274_CTRL_VS_FOXP3_AND_LEF1_TRANSDUCED_ACTIVATED_CD4_TCELL_DN, GSE40274_CTRL_VS_FOXP3_AND_LEF1_TRANSDUCED_ACTIVATED_CD4_TCELL_DN
                                                                                                               GSE1925_CTRL_VS_IFNG_PRIMED_MACROPHAGE_24H_IFNG_STIM_DN, GSE1925_CTRL_VS_IFNG_PRIMED_MACROPHAGE_24H_IFNG_STIM_DN
                                                                                                               GSE24026_PD1_LIGATION_VS_CTRL_IN_ACT_TCELL_LINE_UP, GSE24026_PD1_LIGATION_VS_CTRL_IN_ACT_TCELL_LINE_UP
                                                                                                               GSE3982_MAST_CELL_VS_DC_UP, GSE3982_MAST_CELL_VS_DC_UP
                                                                                                               GSE11924 TFH VS TH17 CD4 TCELL DN, GSE11924 TFH VS TH17 CD4 TCELL DN
                                                                                                               GSE11924_TFH_VS_TH1_CD4_TCELL_DN, GSE11924_TFH_VS_TH1_CD4_TCELL_DN
                                                                                                                GSE26030_TH1_VS_TH17_RESTIMULATED_DAY5_POST_POLARIZATION_UP, GSE26030_TH1_VS_TH17_RESTIMULATED_DAY5_POST_POLARIZATION_UP
                                                                                                                GSE3982_MAC_VS_TH1_DN, GSE3982_MAC_VS_TH1_DN
                                                                                                               GO_NUCLEOLAR_PART, GO_NUCLEOLAR_PART
                                                                                                               GSE30971_2H_VS_4H_LPS_STIM_MACROPHAGE_WBP7_HET_UP, GSE30971_2H_VS_4H_LPS_STIM_MACROPHAGE_WBP7_HET_UP
                                                                                                               KRIEG_KDM3A_TARGETS_NOT_HYPOXIA, KRIEG_KDM3A_TARGETS_NOT_HYPOXIA
                                                                                                               GO_DNA_SYNTHESIS_INVOLVED_IN_DNA_REPAIR, GO_DNA_SYNTHESIS_INVOLVED_IN_DNA_REPAIR
                                                                                                               GSE17721_CTRL_VS_CPG_24H_BMDC_DN, GSE17721_CTRL_VS_CPG_24H_BMDC_DN
                                                                                                               GO_PROTEIN_LOCALIZATION_TO_MITOCHONDRION, GO_PROTEIN_LOCALIZATION_TO_MITOCHONDRION
                                                                                                               COLDREN_GEFITINIB_RESISTANCE_UP, COLDREN_GEFITINIB_RESISTANCE_UP
                                                                                                               HALLMARK GLYCOLYSIS, HALLMARK GLYCOLYSIS
                                                                                                                TOOKER_GEMCITABINE_RESISTANCE_DN, TOOKER_GEMCITABINE_RESISTANCE_DN
                                                                                                               GSE27786_CD8_TCELL_VS_NKTCELL_UP, GSE27786_CD8_TCELL_VS_NKTCELL_UP
                                                                                                               GO_REGULATION_OF_INTRINSIC_APOPTOTIC_SIGNALING_PATHWAY, GO_REGULATION_OF_INTRINSIC_APOPTOTIC_SIGNALING_PATHWAY
                                                                                                                GSE3982_BCELL_VS_CENT_MEMORY_CD4_TCELL_UP, GSE3982_BCELL_VS_CENT_MEMORY_CD4_TCELL_UP
                                                                                                               GSE40274_CTRL_VS_HELIOS_TRANSDUCED_ACTIVATED_CD4_TCELL_DN, GSE40274_CTRL_VS_HELIOS_TRANSDUCED_ACTIVATED_CD4_TCELL_DN
                                                                                                                GSE11864_UNTREATED_VS_CSF1_IFNG_PAM3CYS_IN_MAC_DN, GSE11864_UNTREATED_VS_CSF1_IFNG_PAM3CYS_IN_MAC_DN
                                                                                                                HALLMARK_FATTY_ACID_METABOLISM, HALLMARK_FATTY_ACID_METABOLISM
                                                                                                               GO_PROTEIN_TETRAMERIZATION, GO_PROTEIN_TETRAMERIZATION
                                                                                                                GO_PROTEIN_TARGETING_TO_MITOCHONDRION, GO_PROTEIN_TARGETING_TO_MITOCHONDRION
                                                                                                                GSE21774_CD56_BRIGHT_VS_DIM_CD62L_POSITIVE_NK_CELL_DN, GSE21774_CD56_BRIGHT_VS_DIM_CD62L_POSITIVE_NK_CELL_DN
                                                                                                                GSE27786_LSK_VS_LIN_NEG_CELL_DN, GSE27786_LSK_VS_LIN_NEG_CELL_DN
                                                                                                                GO_NUCLEOID, GO_NUCLEOID
                                                                                                                GSE3982_MAC_VS_BASOPHIL_UP, GSE3982_MAC_VS_BASOPHIL_UP
                                                                                                                GSE19888_ADENOSINE_A3R_ACT_VS_A3R_ACT_WITH_A3R_INH_PRETREATMENT_IN_MAST_CELL_DN, GSE19888_ADENOSINE_A3R_ACT_VS_A3R_ACT_WITH_A3R_INH_PRETREATMENT_IN_MAST_CELL_DN
                                                                                                                GSE21033 1H VS 24H POLYIC STIM DC DN, GSE21033 1H VS 24H POLYIC STIM DC DN
                                                                                                                GSE39820_TGFBETA1_IL6_VS_TGFBETA1_IL6_IL23A_TREATED_CD4_TCELL_DN, GSE39820_TGFBETA1_IL6_VS_TGFBETA1_IL6_IL23A_TREATED_CD4_TCELL_DN
                                                                                                                GSE2770_IL12_AND_TGFB_ACT_VS_ACT_CD4_TCELL_48H_UP, GSE2770_IL12_AND_TGFB_ACT_VS_ACT_CD4_TCELL_48H_UP
                                                                                                                GO_MITOCHONDRIAL_TRANSMEMBRANE_TRANSPORT, GO_MITOCHONDRIAL_TRANSMEMBRANE_TRANSPORT
                                                                                                                GSE3982_MAST_CELL_VS_TH1_DN, GSE3982_MAST_CELL_VS_TH1_DN
                                                                                                                GO_POSITIVE_REGULATION_OF_GENE_EXPRESSION_EPIGENETIC, GO_POSITIVE_REGULATION_OF_GENE_EXPRESSION_EPIGENETIC
                                                                                                                GO_ISOMERASE_ACTIVITY, GO_ISOMERASE_ACTIVITY
                                                                                                                GSE39820_TGFBETA1_VS_TGFBETA3_IN_IL6_IL23A_TREATED_CD4_TCELL_UP, GSE39820_TGFBETA1_VS_TGFBETA3_IN_IL6_IL23A_TREATED_CD4_TCELL_UP
                                                                                                                GSE27786_CD8_TCELL_VS_NKCELL_UP, GSE27786_CD8_TCELL_VS_NKCELL_UP
                                                                                                                GO_LYASE_ACTIVITY, GO_LYASE_ACTIVITY
                                                                                                                GSE12839 CTRL VS IL12 TREATED PBMC UP, GSE12839 CTRL VS IL12 TREATED PBMC UP
                                                                                                               GSE19923_E2A_KO_VS_E2A_AND_HEB_KO_DP_THYMOCYTE_DN, GSE19923_E2A_KO_VS_E2A_AND_HEB_KO_DP_THYMOCYTE_DN
                                                                                                               GSE9988_LPS_VS_VEHICLE_TREATED_MONOCYTE_UP, GSE9988_LPS_VS_VEHICLE_TREATED_MONOCYTE_UP
                                                                                                               GSE11924_TFH_VS_TH2_CD4_TCELL_DN, GSE11924_TFH_VS_TH2_CD4_TCELL_DN
                                                                                                               MORF_HEAB, MORF_HEAB
                                                                                                               REACTOME INTERACTIONS OF VPR WITH HOST CELLULAR PROTEINS, REACTOME INTERACTIONS OF VPR WITH HOST CELLULAR PROTEINS
                                                                                                               GO_METAL_CLUSTER_BINDING, GO_METAL_CLUSTER_BINDING
                                                                                                               GSE18791_CTRL_VS_NEWCASTLE_VIRUS_DC_2H_UP, GSE18791_CTRL_VS_NEWCASTLE_VIRUS_DC_2H_UP
                                                                                                               GO_TRANSLESION_SYNTHESIS, GO_TRANSLESION_SYNTHESIS
                                                                                                               GO_ORGANELLE_ENVELOPE_LUMEN, GO_ORGANELLE_ENVELOPE_LUMEN
                                                                                                               GO_NUCLEAR_TRANSCRIPTION_FACTOR_COMPLEX, GO_NUCLEAR_TRANSCRIPTION_FACTOR_COMPLEX
                                                                                                               GSE17721_CTRL_VS_GARDIQUIMOD_6H_BMDC_DN, GSE17721_CTRL_VS_GARDIQUIMOD_6H_BMDC_DN
                                                                                                               GSE3982 BASOPHIL VS EFF MEMORY CD4 TCELL DN, GSE3982 BASOPHIL VS EFF MEMORY CD4 TCELL DN
                                                                                                               GSE9988_LOW_LPS_VS_VEHICLE_TREATED_MONOCYTE_UP, GSE9988_LOW_LPS_VS_VEHICLE_TREATED_MONOCYTE_UP
                                                                                                               KEGG RNA DEGRADATION, KEGG RNA DEGRADATION
                                                                                                               GSE1112_OT1_VS_HY_CD8AB_THYMOCYTE_RTOC_CULTURE_UP, GSE1112_OT1_VS_HY_CD8AB_THYMOCYTE_RTOC_CULTURE_UP
                                                                                                               GSE37416_CTRL_VS_3H_F_TULARENSIS_LVS_NEUTROPHIL_DN, GSE37416_CTRL_VS_3H_F_TULARENSIS_LVS_NEUTROPHIL_DN
                                                                                                               GO_NUCLEAR_TRANSCRIBED_MRNA_CATABOLIC_PROCESS_EXONUCLEOLYTIC, GO_NUCLEAR_TRANSCRIBED_MRNA_CATABOLIC_PROCESS_EXONUCLEOLYTIC
                                                                                                               SHEPARD_CRUSH_AND_BURN_MUTANT_UP, SHEPARD_CRUSH_AND_BURN_MUTANT_UP
                                                                                                               GO MITOCHONDRIAL RNA METABOLIC PROCESS, GO MITOCHONDRIAL RNA METABOLIC PROCESS
                                                                                                               MARZEC IL2 SIGNALING UP, MARZEC IL2 SIGNALING UP
                                                                                                               GO OXIDOREDUCTION COENZYME METABOLIC PROCESS, GO OXIDOREDUCTION COENZYME METABOLIC PROCESS
                                                                                                               GO ORGANELLAR LARGE RIBOSOMAL SUBUNIT, GO ORGANELLAR LARGE RIBOSOMAL SUBUNIT
                                                                                                               MODULE 567, MODULE 567
                                                                                                               GSE9988_LOW_LPS_VS_CTRL_TREATED_MONOCYTE_UP, GSE9988_LOW_LPS_VS_CTRL_TREATED_MONOCYTE_UP
                                                                                                               GSE37533_UNTREATED_VS_PIOGLIZATONE_TREATED_CD4_TCELL_FOXP3_TRASDUCED_CD4_TCELL_UP, GSE37533_UNTREATED_VS_PIOGLIZATONE_TREATED_CD4_TCELL_FOXP3_TRASDUCED_CD4_TCELL_UP
                                                                                                               GO_CARBOHYDRATE_BIOSYNTHETIC_PROCESS, GO_CARBOHYDRATE_BIOSYNTHETIC_PROCESS
                                                                                                               GSE2770_IL12_VS_IL4_TREATED_ACT_CD4_TCELL_6H_UP, GSE2770_IL12_VS_IL4_TREATED_ACT_CD4_TCELL_6H_UP
                                                                                                               KEGG_AMINO_SUGAR_AND_NUCLEOTIDE_SUGAR_METABOLISM, KEGG_AMINO_SUGAR_AND_NUCLEOTIDE_SUGAR_METABOLISM
                                                                                                               GO AEROBIC RESPIRATION, GO AEROBIC RESPIRATION
                                                                                                               GO_ATP_BIOSYNTHETIC_PROCESS, GO_ATP_BIOSYNTHETIC_PROCESS
                                                                                                               GSE1448_ANTI_VALPHA2_VS_VBETA5_DP_THYMOCYTE_DN, GSE1448_ANTI_VALPHA2_VS_VBETA5_DP_THYMOCYTE_DN
                                                                                                               GO_NADH_DEHYDROGENASE_COMPLEX, GO_NADH_DEHYDROGENASE_COMPLEX
                                                                                                               REACTOME_PYRUVATE_METABOLISM_AND_CITRIC_ACID_TCA_CYCLE, REACTOME_PYRUVATE_METABOLISM_AND_CITRIC_ACID_TCA_CYCLE
                                                                                                               GSE17721_LPS_VS_GARDIQUIMOD_2H_BMDC_UP, GSE17721_LPS_VS_GARDIQUIMOD_2H_BMDC_UP
                                                                                                                GSE3982_CENT_MEMORY_CD4_TCELL_VS_NKCELL_DN, GSE3982_CENT_MEMORY_CD4_TCELL_VS_NKCELL_DN
                                                                                                               GO_REPLISOME, GO_REPLISOME
                                                                                                               GO_OXIDOREDUCTASE_COMPLEX, GO_OXIDOREDUCTASE_COMPLEX
                                                                                                                GO_4_IRON_4_SULFUR_CLUSTER_BINDING, GO_4_IRON_4_SULFUR_CLUSTER_BINDING
                                                                                                                GO_MATURATION_OF_SSU_RRNA_FROM_TRICISTRONIC_RRNA_TRANSCRIPT_SSU_RRNA_5_8S_RRNA_LSU_RRNA_, GO_MATURATION_OF_SSU_RRNA_FROM_TRICISTRONIC_RRNA_TRANSCRIPT_SSU_RRNA_5_8S_RRNA_LSU_RRNA_
                                                                                                                GSE8921_UNSTIM_VS_TLR1_2_STIM_MONOCYTE_6H_DN, GSE8921_UNSTIM_VS_TLR1_2_STIM_MONOCYTE_6H_DN
                                                                                                                GSE17721_LPS_VS_POLYIC_4H_BMDC_UP, GSE17721_LPS_VS_POLYIC_4H_BMDC_UP
                                                                                                                GSE24574_BCL6_LOW_TFH_VS_NAIVE_CD4_TCELL_UP, GSE24574_BCL6_LOW_TFH_VS_NAIVE_CD4_TCELL_UP
                                                                                                                GSE34515_CD16_NEG_VS_POS_MONOCYTE_UP, GSE34515_CD16_NEG_VS_POS_MONOCYTE_UP
                                                                                                                KEEN_RESPONSE_TO_ROSIGLITAZONE_UP, KEEN_RESPONSE_TO_ROSIGLITAZONE_UP
                                                                                                                REACTOME_CITRIC_ACID_CYCLE_TCA_CYCLE, REACTOME_CITRIC_ACID_CYCLE_TCA_CYCLE
                                                                                                                GSE15930_STIM_VS_STIM_AND_TRICHOSTATINA_72H_CD8_T_CELL_DN, GSE15930_STIM_VS_STIM_AND_TRICHOSTATINA_72H_CD8_T_CELL_DN
                                                                                                               WILCOX_RESPONSE_TO_PROGESTERONE_UP, WILCOX_RESPONSE_TO_PROGESTERONE_UP
                                                                                                               GO_REGULATION_OF_EXTRINSIC_APOPTOTIC_SIGNALING_PATHWAY, GO_REGULATION_OF_EXTRINSIC_APOPTOTIC_SIGNALING_PATHWAY
                                                                                                               GO_INTRAMOLECULAR_TRANSFERASE_ACTIVITY, GO_INTRAMOLECULAR_TRANSFERASE_ACTIVITY
                                                                                                               GO_2_IRON_2_SULFUR_CLUSTER_BINDING, GO_2_IRON_2_SULFUR_CLUSTER_BINDING
                                                                                                              GO_CARBOHYDRATE_CATABOLIC_PROCESS, GO_CARBOHYDRATE_CATABOLIC_PROCESS
TERTIARY_MEMORY_CD8_TCELL_UP, GSE21360_SECONDARY_VS_TERTIARY_MEMORY_CD8_TCELL_UP
                                                                                                               GO_HEXOSE_CATABOLIC_PROCESS, GO_HEXOSE_CATABOLIC_PROCESS
                                                                                                               GO_SNRNA_PROCESSING, GO_SNRNA_PROCESSING
                                                                                                               GO_NAD_METABOLIC_PROCESS, GO_NAD_METABOLIC_PROCESS
                                                                                                               GO_NUCLEOTIDE_PHOSPHORYLATION, GO_NUCLEOTIDE_PHOSPHORYLATION
                                                                                                               GO_REGULATION_OF_GLUCOSE_TRANSPORT, GO_REGULATION_OF_GLUCOSE_TRANSPORT
                                                                                                                GO_MATURATION_OF_5_8S_RRNA, GO_MATURATION_OF_5_8S_RRNA
                                                                                                                GSE46606_IRF4HIGH_VS_WT_CD40L_IL2_IL5_DAY1_STIMULATED_BCELL_DN, GSE46606_IRF4HIGH_VS_WT_CD40L_IL2_IL5_DAY1_STIMULATED_BCELL_DN
                                                                                                                GO_NUCLEAR_EXOSOME_RNASE_COMPLEX_, GO_NUCLEAR_EXOSOME_RNASE_COMPLEX_
                                                                                                                GO_MONOSACCHARIDE_METABOLIC_PROCESS, GO_MONOSACCHARIDE_METABOLIC_PROCESS
                                                                                                                GSE11961_FOLLICULAR_BCELL_VS_PLASMA_CELL_DAY7_UP, GSE11961_FOLLICULAR_BCELL_VS_PLASMA_CELL_DAY7_UP
                                                                                                                GO_PROTEIN_HOMOTETRAMERIZATION, GO_PROTEIN_HOMOTETRAMERIZATION
                                                                                                                MODY_HIPPOCAMPUS_POSTNATAL, MODY_HIPPOCAMPUS_POSTNATAL
                                                                                                                GO_POSITIVE_REGULATION_OF_INTRINSIC_APOPTOTIC_SIGNALING_PATHWAY, GO_POSITIVE_REGULATION_OF_INTRINSIC_APOPTOTIC_SIGNALING_PATHWAY
                                                                                                                GO_RNA_POLYMERASE_II_TRANSCRIPTION_COFACTOR_ACTIVITY, GO_RNA_POLYMERASE_II_TRANSCRIPTION_COFACTOR_ACTIVITY
                                                                                                                GO_MITOCHONDRIAL_RNA_PROCESSING, GO_MITOCHONDRIAL_RNA_PROCESSING
                                                                                                                GO_PROTON_TRANSPORTING_ATP_SYNTHASE_COMPLEX, GO_PROTON_TRANSPORTING_ATP_SYNTHASE_COMPLEX
                                                                                                                GSE39820_TGFBETA1_VS_TGFBETA3_IN_IL6_IL23A_TREATED_CD4_TCELL_DN, GSE39820_TGFBETA1_VS_TGFBETA3_IN_IL6_IL23A_TREATED_CD4_TCELL_DN
                                                                                                               GO_PIGMENT_BIOSYNTHETIC_PROCESS, GO_PIGMENT_BIOSYNTHETIC_PROCESS
                                                                                                               GO_BLASTOCYST_GROWTH, GO_BLASTOCYST_GROWTH
                                                                                                               GO_REGULATION_OF_PROTEIN_SUMOYLATION, GO_REGULATION_OF_PROTEIN_SUMOYLATION
                                                                                                               REACTOME_PEROXISOMAL_LIPID_METABOLISM, REACTOME_PEROXISOMAL_LIPID_METABOLISM
                                                                                                               GO_RNA_PHOSPHODIESTER_BOND_HYDROLYSIS_ENDONUCLEOLYTIC, GO_RNA_PHOSPHODIESTER_BOND_HYDROLYSIS_ENDONUCLEOLYTIC
                                                                                                               GO_ENERGY_COUPLED_PROTON_TRANSPORT_DOWN_ELECTROCHEMICAL_GRADIENT, GO_ENERGY_COUPLED_PROTON_TRANSPORT_DOWN_ELECTROCHEMICAL_GRADIENT
                                                                                                               GO_TRICARBOXYLIC_ACID_METABOLIC_PROCESS, GO_TRICARBOXYLIC_ACID_METABOLIC_PROCESS
                                                                                                               GO_MONOSACCHARIDE_CATABOLIC_PROCESS, GO_MONOSACCHARIDE_CATABOLIC_PROCESS
                                                                                                               EIF4E_UP, EIF4E_UP
                                                                                                               GO_CELLULAR_CARBOHYDRATE_METABOLIC_PROCESS, GO_CELLULAR_CARBOHYDRATE_METABOLIC_PROCESS
                                                                                                               GO PENTOSE PHOSPHATE SHUNT, GO PENTOSE PHOSPHATE SHUNT
                                                                                                               GO_MITOCHONDRION_MORPHOGENESIS, GO_MITOCHONDRION_MORPHOGENESIS
                                                                                                               GO_TETRAPYRROLE_BIOSYNTHETIC_PROCESS, GO_TETRAPYRROLE_BIOSYNTHETIC_PROCESS
                                                                                                               YYCATTCAWW_UNKNOWN, YYCATTCAWW_UNKNOWN
                                                                                                               GSE28783_CTRL_ANTI_MIR_VS_UNTREATED_ATHEROSCLEROSIS_MACROPHAGE_UP, GSE28783_CTRL_ANTI_MIR_VS_UNTREATED_ATHEROSCLEROSIS_MACROPHAGE_UP
                                                                                                               GRAHAM_CML_QUIESCENT_VS_NORMAL_QUIESCENT_UP, GRAHAM_CML_QUIESCENT_VS_NORMAL_QUIESCENT_UP
                                                                                                               GO_REGULATION_OF_GENERATION_OF_PRECURSOR_METABOLITES_AND_ENERGY, GO_REGULATION_OF_GENERATION_OF_PRECURSOR_METABOLITES_AND_ENERGY
                                                                                                               REACTOME_PPARA_ACTIVATES_GENE_EXPRESSION, REACTOME_PPARA_ACTIVATES_GENE_EXPRESSION
                                                                                                                MODULE_325, MODULE_325
                                                                                                               GO_TRANSCRIPTION_FROM_RNA_POLYMERASE_I_PROMOTER, GO_TRANSCRIPTION_FROM_RNA_POLYMERASE_I_PROMOTER
                                                                                                               GO_SUBSTANTIA_NIGRA_DEVELOPMENT, GO_SUBSTANTIA_NIGRA_DEVELOPMENT
                                                                                                               GO_XENOPHAGY, GO_XENOPHAGY
                                                                                                               GO_3_5_DNA_HELICASE_ACTIVITY, GO_3_5_DNA_HELICASE_ACTIVITY
                                                                                                               GO_TRNA_SPECIFIC_RIBONUCLEASE_ACTIVITY, GO_TRNA_SPECIFIC_RIBONUCLEASE_ACTIVITY
                                                                                                               GSE43863 TFH VS LY6C INT CXCR5POS MEMORY CD4 TCELL DN, GSE43863 TFH VS LY6C INT CXCR5POS MEMORY CD4 TCELL DN
                                                                                                               GNF2_CDC27, GNF2_CDC27
                                                                                                               GO_GLUCOSE_6_PHOSPHATE_METABOLIC_PROCESS, GO_GLUCOSE_6_PHOSPHATE_METABOLIC_PROCESS
                                                                                                               GSE41176_WT_VS_TAK1_KO_ANTI_IGM_STIM_BCELL_3H_UP, GSE41176_WT_VS_TAK1_KO_ANTI_IGM_STIM_BCELL_3H_UP
                                                                                                                BRACHAT RESPONSE TO METHOTREXATE DN, BRACHAT RESPONSE TO METHOTREXATE DN
                                                                                                                GO_MITOCHONDRIAL_GENOME_MAINTENANCE, GO_MITOCHONDRIAL_GENOME_MAINTENANCE
                                                                                                               GO_NADH_METABOLIC_PROCESS, GO_NADH_METABOLIC_PROCESS
                                                                                                                GO_ANDROGEN_RECEPTOR_BINDING, GO_ANDROGEN_RECEPTOR_BINDING
                                                                                                               CYCLIN D1 KE .V1 UP, CYCLIN D1 KE .V1 UP
                                                                                                                GO_ASPARTATE_FAMILY_AMINO_ACID_METABOLIC_PROCESS, GO_ASPARTATE_FAMILY_AMINO_ACID_METABOLIC_PROCESS
                                                                                                                MOOTHA_TCA, MOOTHA_TCA
                                                                                                                KEGG FRUCTOSE AND MANNOSE METABOLISM, KEGG FRUCTOSE AND MANNOSE METABOLISM
                                                                                                                GO_MONOSACCHARIDE_BIOSYNTHETIC_PROCESS, GO_MONOSACCHARIDE_BIOSYNTHETIC_PROCESS
                                                                                                                GO_CARBON_CARBON_LYASE_ACTIVITY, GO_CARBON_CARBON_LYASE_ACTIVITY
                                                                                                                GO_MITOCHONDRIAL_ATP_SYNTHESIS_COUPLED_PROTON_TRANSPORT, GO_MITOCHONDRIAL_ATP_SYNTHESIS_COUPLED_PROTON_TRANSPORT
                                                                                                                GSE9316_CD4_TCELL_BALBC_VS_TH17_ENRI_CD4_TCELL_SKG_PMA_IONO_STIM_FR4NEG_UP, GSE9316_CD4_TCELL_BALBC_VS_TH17_ENRI_CD4_TCELL_SKG_PMA_IONO_STIM_FR4NEG_UP
                                                                                                                WANG_ADIPOGENIC_GENES_REPRESSED_BY_SIRT1, WANG_ADIPOGENIC_GENES_REPRESSED_BY_SIRT1
                                                                                                                GO_HEME_BIOSYNTHETIC_PROCESS, GO_HEME_BIOSYNTHETIC_PROCESS
                                                                                                                GO_ADP_METABOLIC_PROCESS, GO_ADP_METABOLIC_PROCESS
                                                                                                                GO_ATP_GENERATION_FROM_ADP, GO_ATP_GENERATION_FROM_ADP
                                                                                                                REACTOME FORMATION OF ATP BY CHEMIOSMOTIC COUPLING, REACTOME FORMATION OF ATP BY CHEMIOSMOTIC COUPLING
                                                                                                                GSE17721_CTRL_VS_LPS_4H_BMDC_DN, GSE17721_CTRL_VS_LPS_4H_BMDC_DN
                                                                                                                GO_NEURAL_NUCLEUS_DEVELOPMENT, GO_NEURAL_NUCLEUS_DEVELOPMENT
                                                                                                                GO_ENDORIBONUCLEASE_COMPLEX, GO_ENDORIBONUCLEASE_COMPLEX
                                                                                                                JAZAERI_BREAST_CANCER_BRCA1_VS_BRCA2_UP, JAZAERI_BREAST_CANCER_BRCA1_VS_BRCA2_UP
                                                                                                                GO_INTRACILIARY_TRANSPORT_PARTICLE_B, GO_INTRACILIARY_TRANSPORT_PARTICLE_B
                                                                                                                IWANAGA_E2F1_TARGETS_INDUCED_BY_SERUM, IWANAGA_E2F1_TARGETS_INDUCED_BY_SERUM
                                                                                                                MODULE 272, MODULE 272
                                                                                                               GO_PROTEIN_IMPORT_INTO_MITOCHONDRIAL_MATRIX, GO_PROTEIN_IMPORT_INTO_MITOCHONDRIAL_MATRIX
                                                                                                                GO_MATURATION_OF_5_8S_RRNA_FROM_TRICISTRONIC_RRNA_TRANSCRIPT_SSU_RRNA_5_8S_RRNA_LSU_RRNA_, GO_MATURATION_OF_5_8S_RRNA_FROM_TRICISTRONIC_RRNA_TRANSCRIPT_SSU_RRNA_5_8S_RRNA_LSU_RRNA_
                                                                                                                GO_CARBOXY_TERMINAL_DOMAIN_PROTEIN_KINASE_COMPLEX, GO_CARBOXY_TERMINAL_DOMAIN_PROTEIN_KINASE_COMPLEX
                                                                                                               GO_GLUCOSE_CATABOLIC_PROCESS, GO_GLUCOSE_CATABOLIC_PROCESS
                                                                                                                SEIDEN_MET_SIGNALING, SEIDEN_MET_SIGNALING
                                                                                                                NADLER_OBESITY_DN, NADLER_OBESITY_DN
                                                                                                                GO REGULATION OF CYSTEINE TYPE ENDOPEPTIDASE ACTIVITY INVOLVED IN APOPTOTIC SIGNALING PATHWAY, GO REGULATION OF CYSTEINE TYPE ENDOPEPTIDASE ACTIVITY INVOLVED IN APOPTOTIC SIGNALING PATHWAY
                                                                                                               chr6p23, chr6p23
                                                                                                               GO_REGULATION_OF_NUCLEOSIDE_METABOLIC_PROCESS, GO_REGULATION_OF_NUCLEOSIDE_METABOLIC_PROCESS
                                                                                                               GO_POSITIVE_REGULATION_OF_EXTRINSIC_APOPTOTIC_SIGNALING_PATHWAY, GO_POSITIVE_REGULATION_OF_EXTRINSIC_APOPTOTIC_SIGNALING_PATHWAY
                                                                                                               GO_OXIDOREDUCTASE_ACTIVITY_ACTING_ON_THE_CH_CH_GROUP_OF_DONORS, GO_OXIDOREDUCTASE_ACTIVITY_ACTING_ON_THE_CH_CH_GROUP_OF_DONORS
                                                                                                               GO_REGULATION_OF_PROTEIN_OLIGOMERIZATION, GO_REGULATION_OF_PROTEIN_OLIGOMERIZATION
                                                                                                               GO_RESPONSE_TO_TRANSITION_METAL_NANOPARTICLE, GO_RESPONSE_TO_TRANSITION_METAL_NANOPARTICLE
                                                                                                                KEGG_PENTOSE_PHOSPHATE_PATHWAY, KEGG_PENTOSE_PHOSPHATE_PATHWAY
                                                                                                                GO_QUINONE_BINDING, GO_QUINONE_BINDING
                                                                                                                GSE12707_AT16L1_HYPOMORPH_VS_WT_THYMUS_UP, GSE12707_AT16L1_HYPOMORPH_VS_WT_THYMUS_UP
                                                                                                                HONRADO_BREAST_CANCER_BRCA1_VS_BRCA2, HONRADO_BREAST_CANCER_BRCA1_VS_BRCA2
                                                                                                               IWANAGA_CARCINOGENESIS_BY_KRAS_PTEN_UP, IWANAGA_CARCINOGENESIS_BY_KRAS_PTEN_UP
                                                                                                               GSE3982_DC_VS_MAC_DN, GSE3982_DC_VS_MAC_DN
                                                                                                               GO_POSITIVE_REGULATION_OF_RNA_SPLICING, GO_POSITIVE_REGULATION_OF_RNA_SPLICING
                                                                                                               RAY_TUMORIGENESIS_BY_ERBB2_CDC25A_UP, RAY_TUMORIGENESIS_BY_ERBB2_CDC25A_UP
                                                                                                               GO_PIGMENT_METABOLIC_PROCESS, GO_PIGMENT_METABOLIC_PROCESS
                                                                                                               BIOCARTA_GLYCOLYSIS_PATHWAY, BIOCARTA_GLYCOLYSIS_PATHWAY
                                                                                                               MELLMAN_TUT1_TARGETS_UP, MELLMAN_TUT1_TARGETS_UP
                                                                                                               GO_RIBONUCLEASE_P_ACTIVITY, GO_RIBONUCLEASE_P_ACTIVITY
                                                                                                               GO_REGULATION_OF_OXIDATIVE_PHOSPHORYLATION, GO_REGULATION_OF_OXIDATIVE_PHOSPHORYLATION
                                                                                                               LEE_LIVER_CANCER_MYC_E2F1_DN, LEE_LIVER_CANCER_MYC_E2F1_DN
                                                                                                               MODULE_210, MODULE_210
                                                                                                               GRAESSMANN_RESPONSE_TO_MC_AND_SERUM_DEPRIVATION_DN, GRAESSMANN_RESPONSE_TO_MC_AND_SERUM_DEPRIVATION_DN
                                                                                                               REACTOME_AMINO_ACID_SYNTHESIS_AND_INTERCONVERSION_TRANSAMINATION, REACTOME_AMINO_ACID_SYNTHESIS_AND_INTERCONVERSION_TRANSAMINATION
                                                                                                               GO_INNER_CELL_MASS_CELL_PROLIFERATION, GO_INNER_CELL_MASS_CELL_PROLIFERATION
                                                                                                               MODULE_539, MODULE_539
                                                                                                               GO_NADP_METABOLIC_PROCESS, GO_NADP_METABOLIC_PROCESS
                                                                                                               GO_CELLULAR_KETONE_METABOLIC_PROCESS, GO_CELLULAR_KETONE_METABOLIC_PROCESS
                                                                                                               GO_CLEAVAGE_INVOLVED_IN_RRNA_PROCESSING, GO_CLEAVAGE_INVOLVED_IN_RRNA_PROCESSING
                                                                                                               REACTOME_ACTIVATION_OF_GENES_BY_ATF4, REACTOME_ACTIVATION_OF_GENES_BY_ATF4
                                                                                                               GO_ALDEHYDE_CATABOLIC_PROCESS, GO_ALDEHYDE_CATABOLIC_PROCESS
                                                                                                               GSE9946_IMMATURE_VS_LISTERIA_INF_MATURE_DC_DN, GSE9946_IMMATURE_VS_LISTERIA_INF_MATURE_DC_DN
                                                                                                               DOANE_BREAST_CANCER_CLASSES_DN, DOANE_BREAST_CANCER_CLASSES_DN
                                                                                                               GO_PROTEIN_EXIT_FROM_ENDOPLASMIC_RETICULUM, GO_PROTEIN_EXIT_FROM_ENDOPLASMIC_RETICULUM
                                                                                                               GO_POSITIVE_REGULATION_OF_PROTEIN_AUTOPHOSPHORYLATION, GO_POSITIVE_REGULATION_OF_PROTEIN_AUTOPHOSPHORYLATION
                                                                                                               GO_REGULATION_OF_PROTEIN_AUTOPHOSPHORYLATION, GO_REGULATION_OF_PROTEIN_AUTOPHOSPHORYLATION
                                                                                                               GO_POSITIVE_REGULATION_OF_PROTEIN_LOCALIZATION_TO_CELL_SURFACE, GO_POSITIVE_REGULATION_OF_PROTEIN_LOCALIZATION_TO_CELL_SURFACE
                                                                                                               GAUSSMANN_MLL_AF4_FUSION_TARGETS_G_DN, GAUSSMANN_MLL_AF4_FUSION_TARGETS_G_DN
                                                                                                               GO_CELLULAR_ALDEHYDE_METABOLIC_PROCESS, GO_CELLULAR_ALDEHYDE_METABOLIC_PROCESS
                                                                                                               GO_P53_BINDING, GO_P53_BINDING
                                                                                                               GO_CELLULAR_RESPONSE_TO_GLUCOSE_STARVATION, GO_CELLULAR_RESPONSE_TO_GLUCOSE_STARVATION
                                                                                                               GO_REGULATION_OF_ANDROGEN_RECEPTOR_SIGNALING_PATHWAY, GO_REGULATION_OF_ANDROGEN_RECEPTOR_SIGNALING_PATHWAY
                                                                                                               REACTOME_RNA_POL_I_TRANSCRIPTION_INITIATION, REACTOME_RNA_POL_I_TRANSCRIPTION_INITIATION
                                                                                                               MORF CASP10, MORF CASP10
                                                                                                               GO_BETA_AMYLOID_BINDING, GO_BETA_AMYLOID_BINDING
                                                                                                               GO_RESPONSE_TO_IRON_ION, GO_RESPONSE_TO_IRON_ION
                                                                                                               REACTOME_RNA_POL_I_TRANSCRIPTION_TERMINATION, REACTOME_RNA_POL_I_TRANSCRIPTION_TERMINATION
                                                                                                               GO_REGULATION_OF_RECEPTOR_BIOSYNTHETIC_PROCESS, GO_REGULATION_OF_RECEPTOR_BIOSYNTHETIC_PROCESS
                                                                                                               GO_HEME_METABOLIC_PROCESS, GO_HEME_METABOLIC_PROCESS
                                                                                                               GO_REGULATION_OF_CELLULAR_RESPIRATION, GO_REGULATION_OF_CELLULAR_RESPIRATION
                                                                                                               chr20q11, chr20q11
                                                                                                               DACOSTA_UV_RESPONSE_VIA_ERCC3_XPCS_UP, DACOSTA_UV_RESPONSE_VIA_ERCC3_XPCS_UP
                                                                                                               GO_HEPATICOBILIARY_SYSTEM_DEVELOPMENT, GO_HEPATICOBILIARY_SYSTEM_DEVELOPMENT
                                                                                                               GO_RNA_POLYMERASE_II_CARBOXY_TERMINAL_DOMAIN_KINASE_ACTIVITY, GO_RNA_POLYMERASE_II_CARBOXY_TERMINAL_DOMAIN_KINASE_ACTIVITY
                                                                                                               PID_RETINOIC_ACID_PATHWAY, PID_RETINOIC_ACID_PATHWAY
                                                                                                               GO_PORPHYRIN_CONTAINING_COMPOUND_METABOLIC_PROCESS, GO_PORPHYRIN_CONTAINING_COMPOUND_METABOLIC_PROCESS
                                                                                                               ZWANG_EGF_PERSISTENTLY_UP, ZWANG_EGF_PERSISTENTLY_UP
                                                                                                                KIM_HYPOXIA, KIM_HYPOXIA
                                                                                                               GSE17721_CPG_VS_GARDIQUIMOD_2H_BMDC_UP, GSE17721_CPG_VS_GARDIQUIMOD_2H_BMDC_UP
                                                                                                                GO_POSITIVE_REGULATION_OF_DNA_BINDING, GO_POSITIVE_REGULATION_OF_DNA_BINDING
                                                                                                                GO_REGULATION_OF_PROTEIN_LOCALIZATION_TO_CELL_SURFACE, GO_REGULATION_OF_PROTEIN_LOCALIZATION_TO_CELL_SURFACE
                                                                                                                WALLACE_JAK2_TARGETS_UP, WALLACE_JAK2_TARGETS_UP
                                                                                                                GSE19888_ADENOSINE_A3R_INH_VS_INH_PRETREAT_AND_ACT_WITH_TCELL_MEMBRANES_MAST_CELL_DN, GSE19888_ADENOSINE_A3R_INH_VS_INH_PRETREAT_AND_ACT_WITH_TCELL_MEMBRANES_MAST_CELL_DN
                                                                                                                HOLLEMAN_VINCRISTINE_RESISTANCE_ALL_UP, HOLLEMAN_VINCRISTINE_RESISTANCE_ALL_UP
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