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GSE22527_ANTI_CD3_INVIVO_VS_UNTREATED_MOUSE_TREG_DN, GSE22527_ANTI_CD3_INVIVO_VS_UNTREATED_MOUSE_TREG_DN
 GSE20152 SPHK1 KO VS HTNFA OVEREXPRESS ANKLE DN, GSE20152 SPHK1 KO VS HTNFA OVEREXPRESS ANKLE DN
 GSE21033 CTRL VS POLYIC STIM DC 3H UP, GSE21033 CTRL VS POLYIC STIM DC 3H UP
 GSE22033_UNTREATED_VS_ROSIGLITAZONE_TREATED_MEF_UP, GSE22033_UNTREATED_VS_ROSIGLITAZONE_TREATED_MEF_UP
 GSE20500_CTRL_VS_RARA_ANTAGONIST_TREATED_CD4_TCELL_DN, GSE20500_CTRL_VS_RARA_ANTAGONIST_TREATED_CD4_TCELL_DN
 GSE37301_COMMON_LYMPHOID_PROGENITOR_VS_CD4_TCELL_DN, GSE37301_COMMON_LYMPHOID_PROGENITOR_VS_CD4_TCELL_DN
 GSE37301_LYMPHOID_PRIMED_MPP_VS_CD4_TCELL_DN, GSE37301_LYMPHOID_PRIMED_MPP_VS_CD4_TCELL_DN
 GSE41176_WT_VS_TAK1_KO_ANTI_IGM_STIM_BCELL_24H_DN, GSE41176_WT_VS_TAK1_KO_ANTI_IGM_STIM_BCELL_24H_DN
GSE3982_MAC_VS_NEUTROPHIL_UP, GSE3982_MAC_VS_NEUTROPHIL_UP
 GSE360_DC_VS_MAC_UP, GSE360_DC_VS_MAC_UP
 GSE19401_RETINOIC_ACID_VS_RETINOIC_ACID_AND_PAM2CSK4_STIM_FOLLICULAR_DC_DN, GSE19401_RETINOIC_ACID_VS_RETINOIC_ACID_AND_PAM2CSK4_STIM_FOLLICULAR_DC_DN
 GSE22033_WT_VS_PPARG_KO_MEF_DN, GSE22033_WT_VS_PPARG_KO_MEF_DN
GSE1460_DP_THYMOCYTE_VS_THYMIC_STROMAL_CELL_UP, GSE1460_DP_THYMOCYTE_VS_THYMIC_STROMAL_CELL_UP
 GSE3982_BCELL_VS_BASOPHIL_UP, GSE3982_BCELL_VS_BASOPHIL_UP
MIR3154, MIR3154
GSE3982_DC_VS_EFF_MEMORY_CD4_TCELL_DN, GSE3982_DC_VS_EFF_MEMORY_CD4_TCELL_DN
 GSE1460_NAIVE_CD4_TCELL_CORD_BLOOD_VS_THYMIC_STROMAL_CELL_UP, GSE1460_NAIVE_CD4_TCELL_CORD_BLOOD_VS_THYMIC_STROMAL_CELL_UP
 GSE43955_1H_VS_42H_ACT_CD4_TCELL_WITH_TGFB_IL6_DN, GSE43955_1H_VS_42H_ACT_CD4_TCELL_WITH_TGFB_IL6_DN
HP_APLASTIC_HYPOPLASTIC_TOENAIL, HP_APLASTIC_HYPOPLASTIC_TOENAIL
HP SMALL NAIL, HP SMALL NAIL
 GCCNNNWTAAR UNKNOWN, GCCNNNWTAAR UNKNOWN
 GSE28449 WT VS LRF KO GERMINAL CENTER BCELL UP, GSE28449 WT VS LRF KO GERMINAL CENTER BCELL UP
 GOBP_POSITIVE_REGULATION_OF_ORGANELLE_ASSEMBLY, GOBP_POSITIVE_REGULATION_OF_ORGANELLE_ASSEMBLY
 GSE22611_NOD2_TRANSD_VS_CTRL_TRANSD_HEK293_MDP_STIM_2H_UP, GSE22611_NOD2_TRANSD_VS_CTRL_TRANSD_HEK293_MDP_STIM_2H_UP
 AP2REP 01, AP2REP 01
 HP_HYPOPLASTIC_TOENAILS, HP_HYPOPLASTIC_TOENAILS
ZHONG PFC C4 UNKNOWN INP, ZHONG PFC C4 UNKNOWN INP
HP ABNORMAL SIZE OF THE CLITORIS, HP ABNORMAL SIZE OF THE CLITORIS
 TCCCCAC_MIR491, TCCCCAC_MIR491
 HP_ABNORMALITY_OF_THE_CLITORIS, HP_ABNORMALITY_OF_THE_CLITORIS
HP_ABNORMAL_IRIS_PIGMENTATION, HP_ABNORMAL_IRIS_PIGMENTATION
 MORF FRK, MORF FRK
 GSE2770 IL12_VS_IL4_TREATED_ACT_CD4_TCELL_2H_DN, GSE2770 IL12_VS_IL4_TREATED_ACT_CD4_TCELL_2H_DN
 ZNF202_TARGET_GENES, ZNF202_TARGET_GENES
 HP_BACK_PAIN, HP_BACK_PAIN
 WP_EPITHELIAL_TO_MESENCHYMAL_TRANSITION_IN_COLORECTAL_CANCER, WP_EPITHELIAL_TO_MESENCHYMAL_TRANSITION_IN_COLORECTAL_CANCER
 GSE2706_LPS_VS_R848_AND_LPS_2H_STIM_DC_UP, GSE2706_LPS_VS_R848_AND_LPS_2H_STIM_DC_UP
 QUEREC_MODEL_PBMC_YF_17D_VACCINE_AGE_18_45YO_3DY_PREDICTIVE, QUEREC_MODEL_PBMC_YF_17D_VACCINE_AGE_18_45YO_3DY_PREDICTIVE
MIR1197, MIR1197
REACTOME_CLASS_I_PEROXISOMAL_MEMBRANE_PROTEIN_IMPORT, REACTOME_CLASS_I_PEROXISOMAL_MEMBRANE_PROTEIN_IMPORT
HP SUDDEN DEATH, HP SUDDEN DEATH
TORCHIA_TARGETS_OF_EWSR1_FLI1_FUSION_TOP20_UP, TORCHIA_TARGETS_OF_EWSR1_FLI1_FUSION_TOP20_UP
HMCES_TARGET_GENES, HMCES_TARGET_GENES
REACTOME_TP53_REGULATES_TRANSCRIPTION_OF_GENES_INVOLVED_IN_CYTOCHROME_C_RELEASE, REACTOME_TP53_REGULATES_TRANSCRIPTION_OF_GENES_INVOLVED_IN_CYTOCHROME_C_RELEASE
HP_ABNORMAL_CIRCULATING_LONG_CHAIN_FATTY_ACID_CONCENTRATION, HP_ABNORMAL_CIRCULATING_LONG_CHAIN_FATTY_ACID_CONCENTRATION
MIR494_5P, MIR494_5P
 GOBP_RESPONSE_TO_UV_C, GOBP_RESPONSE_TO_UV_C
 MIR323B_5P, MIR323B_5P
 MIR410_5P, MIR410_5P
XU_HGF_TARGETS_REPRESSED_BY_AKT1_DN, XU_HGF_TARGETS_REPRESSED_BY_AKT1_DN
 HP_VERY_LONG_CHAIN_FATTY_ACID_ACCUMULATION, HP_VERY_LONG_CHAIN_FATTY_ACID_ACCUMULATION
 MIR9903, MIR9903
 HP PROLONGED BLEEDING TIME, HP PROLONGED BLEEDING TIME
 GOBP_REGULATION_OF_RESPONSE_TO_EXTRACELLULAR_STIMULUS, GOBP_REGULATION_OF_RESPONSE_TO_EXTRACELLULAR_STIMULUS
 GOBP_HISTONE_H3_K27_METHYLATION, GOBP_HISTONE_H3_K27_METHYLATION
HP_CEREBELLAR_DYSPLASIA, HP_CEREBELLAR_DYSPLASIA
GOBP_METENCEPHALON_DEVELOPMENT, GOBP_METENCEPHALON_DEVELOPMENT
 GOCC_BLOC_COMPLEX, GOCC_BLOC_COMPLEX
 REACTOME_FORMATION_OF_SENESCENCE_ASSOCIATED_HETEROCHROMATIN_FOCI_SAHF, REACTOME_FORMATION_OF_SENESCENCE_ASSOCIATED_HETEROCHROMATIN_FOCI_SAHF
 HP_BRUSHFIELD_SPOTS, HP_BRUSHFIELD_SPOTS
 GOBP_CELLULAR_RESPONSE_TO_VITAMIN, GOBP_CELLULAR_RESPONSE_TO_VITAMIN
 MODULE_327, MODULE_327
GOBP_SULFUR_AMINO_ACID_CATABOLIC_PROCESS, GOBP_SULFUR_AMINO_ACID_CATABOLIC_PROCESS
GOBP_SOMITE_DEVELOPMENT, GOBP_SOMITE_DEVELOPMENT
- HP_ABNORMAL_CIRCULATING_ACETYLCARNITINE_CONCENTRATION, HP_ABNORMAL_CIRCULATING_ACETYLCARNITINE_CONCENTRATION
GOBP_RESPONSE_TO_VITAMIN_D, GOBP_RESPONSE_TO_VITAMIN_D
REACTOME_BIOSYNTHESIS_OF_SPECIALIZED_PRORESOLVING_MEDIATORS_SPMS, REACTOME_BIOSYNTHESIS_OF_SPECIALIZED_PRORESOLVING_MEDIATORS_SPMS
 HP_CONGENITAL_BLINDNESS, HP_CONGENITAL_BLINDNESS
 GOBP_CELLULAR_RESPONSE_TO_VITAMIN_D, GOBP_CELLULAR_RESPONSE_TO_VITAMIN_D
 MUELLER_COMMON_TARGETS_OF_AML_FUSIONS_UP, MUELLER_COMMON_TARGETS_OF_AML_FUSIONS_UP
GOBP_PROTEIN_O_LINKED_MANNOSYLATION, GOBP_PROTEIN_O_LINKED_MANNOSYLATION
 VRTN_TARGET_GENES, VRTN_TARGET_GENES
 GOMF_CYTOSKELETAL_ANCHOR_ACTIVITY, GOMF_CYTOSKELETAL_ANCHOR_ACTIVITY
 chr2q35, chr2q35
 GOBP_REGULATION_OF_MEIOTIC_CELL_CYCLE, GOBP_REGULATION_OF_MEIOTIC_CELL_CYCLE
 MIR4640_3P, MIR4640_3P
 GOBP_PARAXIAL_MESODERM_DEVELOPMENT, GOBP_PARAXIAL_MESODERM_DEVELOPMENT
 chr5q33, chr5q33
 CLIMENT_BREAST_CANCER_COPY_NUMBER_UP, CLIMENT_BREAST_CANCER_COPY_NUMBER_UP
 REACTOME_INSULIN_PROCESSING, REACTOME_INSULIN_PROCESSING
 HP_ALBINISM, HP_ALBINISM
 GOCC_FASCIA_ADHERENS, GOCC_FASCIA_ADHERENS
 GOBP_G1_TO_G0_TRANSITION, GOBP_G1_TO_G0_TRANSITION
 HP_CONGENITAL_BILATERAL_HIP_DISLOCATION, HP_CONGENITAL_BILATERAL_HIP_DISLOCATION
 HP_GENERALIZED_HYPOPIGMENTATION, HP_GENERALIZED_HYPOPIGMENTATION
SHI_SPARC_TARGETS_DN, SHI_SPARC_TARGETS_DN
HP_PROXIMAL_MUSCLE_WEAKNESS_IN_UPPER_LIMBS, HP_PROXIMAL_MUSCLE_WEAKNESS_IN_UPPER_LIMBS
HP_SKIN_EROSION, HP_SKIN_EROSION
GU_PDEF_TARGETS_DN, GU_PDEF_TARGETS_DN
WP BENZENE METABOLISM, WP BENZENE METABOLISM
HP_LENS_LUXATION, HP_LENS_LUXATION
GOBP_MYELOID_PROGENITOR_CELL_DIFFERENTIATION, GOBP_MYELOID_PROGENITOR_CELL_DIFFERENTIATION
GOBP_EPOXIDE_METABOLIC_PROCESS, GOBP_EPOXIDE_METABOLIC_PROCESS
 GOBP_HOMOSERINE_METABOLIC_PROCESS, GOBP_HOMOSERINE_METABOLIC_PROCESS
GOBP_LIPOXIN_METABOLIC_PROCESS, GOBP_LIPOXIN_METABOLIC_PROCESS
 REACTOME_BIOSYNTHESIS_OF_MARESINS, REACTOME_BIOSYNTHESIS_OF_MARESINS
 GOBP_BRAINSTEM_DEVELOPMENT, GOBP_BRAINSTEM_DEVELOPMENT
 GOBP CARDIAC MUSCLE CELL CARDIAC MUSCLE CELL ADHESION, GOBP CARDIAC MUSCLE CELL CARDIAC MUSCLE CELL ADHESION
 GOBP_REGULATION_OF_VENTRICULAR_CARDIAC_MUSCLE_CELL_ACTION_POTENTIAL, GOBP_REGULATION_OF_VENTRICULAR_CARDIAC_MUSCLE_CELL_ACTION_POTENTIAL
 GOBP_LEUKOCYTE_CHEMOTAXIS_INVOLVED_IN_INFLAMMATORY_RESPONSE, GOBP_LEUKOCYTE_CHEMOTAXIS_INVOLVED_IN_INFLAMMATORY_RESPONSE
 GOBP_MONOTERPENOID_METABOLIC_PROCESS, GOBP_MONOTERPENOID_METABOLIC_PROCESS
 REACTOME_SYNTHESIS_OF_LIPOXINS_LX, REACTOME_SYNTHESIS_OF_LIPOXINS_LX
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GOMF\_CELL\_ADHESIVE\_PROTEIN\_BINDING\_INVOLVED\_IN\_BUNDLE\_OF\_HIS\_CELL\_PURKINJE\_MYOCYTE\_COMMUNICATION, GOMF\_CELL\_ADHESIVE\_PROTEIN\_BINDING\_INVOLVED\_IN\_BUNDLE OF HIS CELL PURKIN

HP\_DECREASED\_CERVICAL\_SPINE\_FLEXION\_DUE\_TO\_CONTRACTURES\_OF\_POSTERIOR\_CERVICAL\_MUSCLES, HP\_DECREASED\_CERVICAL\_SPINE\_FLEXION\_DUE\_TO\_CONTRACTURES\_OF\_POSTERIOR\_CERVICAL\_MUSCL

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Γ HTNFA OVERXPRESS ANKLE DN, GSE20152 SPHK1 KO VS WT HTNFA OVERXPRESS ANKLE DN
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REACTOME LIPID PARTICLE ORGANIZATION, REACTOME LIPID PARTICLE ORGANIZATION

CASTELLANO\_HRAS\_AND\_NRAS\_TARGETS\_DN, CASTELLANO\_HRAS\_AND\_NRAS\_TARGETS\_DN

GOMF RNA DEPENDENT ATPASE ACTIVITY, GOMF RNA DEPENDENT ATPASE ACTIVITY

HP\_RIGHT\_VENTRICULAR\_CARDIOMYOPATHY, HP\_RIGHT\_VENTRICULAR\_CARDIOMYOPATHY

REACTOME\_BIOSYNTHESIS\_OF\_MARESIN\_LIKE\_SPMS, REACTOME\_BIOSYNTHESIS\_OF\_MARESIN\_LIKE\_SPMS

GOBP\_EXCITATORY\_CHEMICAL\_SYNAPTIC\_TRANSMISSION, GOBP\_EXCITATORY\_CHEMICAL\_SYNAPTIC\_TRANSMISSION

GOMF\_STRUCTURAL\_CONSTITUENT\_OF\_TOOTH\_ENAMEL, GOMF\_STRUCTURAL\_CONSTITUENT\_OF\_TOOTH\_ENAMEL

GOMF\_GLUTAMATE\_GATED\_CALCIUM\_ION\_CHANNEL\_ACTIVITY, GOMF\_GLUTAMATE\_GATED\_CALCIUM\_ION\_CHANNEL\_ACTIVITY

HP\_INCREASED\_URINE\_PROTEINOGENIC\_AMINO\_ACID\_DERIVATIVE\_LEVEL, HP\_INCREASED\_URINE\_PROTEINOGENIC\_AMINO\_ACID\_DERIVATIVE\_LEVEL

GOBP\_CAMERA\_TYPE\_EYE\_PHOTORECEPTOR\_CELL\_DIFFERENTIATION, GOBP\_CAMERA\_TYPE\_EYE\_PHOTORECEPTOR\_CELL\_DIFFERENTIATION

GOBP\_CELLULAR\_RESPONSE\_TO\_UV\_C, GOBP\_CELLULAR\_RESPONSE\_TO\_UV\_C

WP FATTY ACID OMEGA OXIDATION, WP FATTY ACID OMEGA OXIDATION

GOBP\_CELL\_MIGRATION\_IN\_HINDBRAIN, GOBP\_CELL\_MIGRATION\_IN\_HINDBRAIN

BIOCARTA\_ACETAMINOPHEN\_PATHWAY, BIOCARTA\_ACETAMINOPHEN\_PATHWAY

HP\_VENTRICULAR\_ESCAPE\_RHYTHM, HP\_VENTRICULAR\_ESCAPE\_RHYTHM

HP\_OVARIAN\_GONADOBLASTOMA, HP\_OVARIAN\_GONADOBLASTOMA

GOBP\_POSITIVE\_REGULATION\_OF\_CELL\_AGING, GOBP\_POSITIVE\_REGULATION\_OF\_CELL\_AGING

HP\_MACULAR\_HYPOPLASIA, HP\_MACULAR\_HYPOPLASIA

HP\_HYPERALDOSTERONISM, HP\_HYPERALDOSTERONISM

GOBP\_LIPID\_HYDROXYLATION, GOBP\_LIPID\_HYDROXYLATION

HP\_ORAL\_MUCOSAL\_BLISTERS, HP\_ORAL\_MUCOSAL\_BLISTERS

HP\_TESTICULAR\_DYSGENESIS, HP\_TESTICULAR\_DYSGENESIS

HP\_4\_5\_TOE\_SYNDACTYLY, HP\_4\_5\_TOE\_SYNDACTYLY

GOBP\_SOMITOGENESIS, GOBP\_SOMITOGENESIS

LE\_SKI\_TARGETS\_DN, LE\_SKI\_TARGETS\_DN

HP\_HYPERGRANULOSIS, HP\_HYPERGRANULOSIS