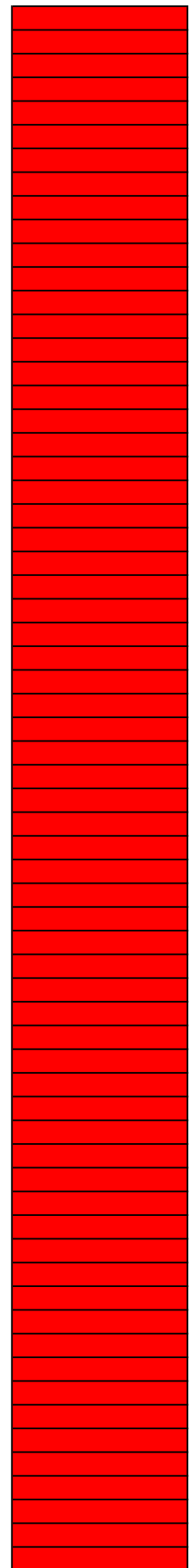


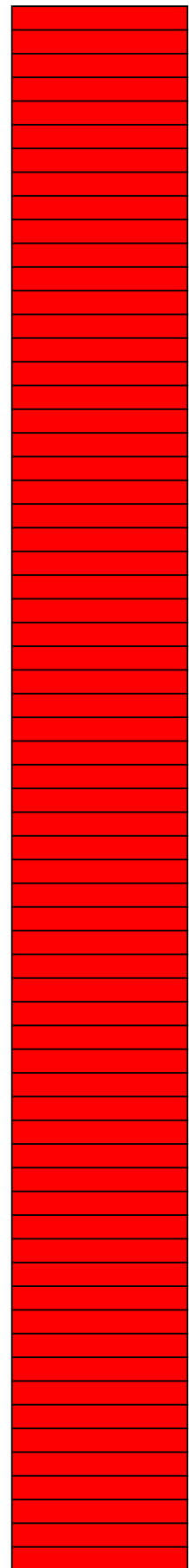
Supplementary Table 1. Complete list of enriched gene sets in lung, liver and kidney based on GSEA. Red boxes denote upregulation during MV+SA, whereas blue boxes indicate relative upregulation under Control condition.

LUNG	
Gene Set	Enrichment Profile
REACTOME_CHEMOKINE_RECEPTORS_BIND_CHEMOKINES	
KEGG_TOLL_LIKE_RECEPTOR_SIGNALING_PATHWAY	
REACTOME_SIGNALING_IN_IMMUNE_SYSTEM	
KEGG_JAK_STAT_SIGNALING_PATHWAY	
KEGG_LEISHMANIA_INFECTION	
KEGG_CYTOKINE_CYTOKINE_RECEPTOR_INTERACTION	
KEGG_CYTOSOLIC_DNA_SENSING_PATHWAY	
REACTOME_S_PHASE	
REACTOME_SYNTHESIS_OF_DNA	
KEGG_CHEMOKINE_SIGNALING_PATHWAY	
REACTOME_G1_S_TRANSITION	
REACTOME_IMMUNOREGULATORY_INTERACTIONS_BETWEEN_A_LYMPHOID_AND_A_NON_LYMPHOID_CELL	
REACTOME_INNATE_IMMUNITY_SIGNALING	
REACTOME_DNA_REPLICATION_PRE_INITIATION	
ST_TUMOR_NECROSIS_FACTOR_PATHWAY	
KEGG_NATURAL_KILLER_CELL_MEDIATED_CYTOTOXICITY	
REACTOME_TOLL_LIKE_RECEPTOR_4_CASCADE	
KEGG_T_CELL_RECEPTOR_SIGNALING_PATHWAY	
KEGG_NOD_LIKE_RECEPTOR_SIGNALING_PATHWAY	
REACTOME_CYTOSOLIC_TRNA_AMINOACYLATION	
REACTOME_TOLL_RECEPTOR_CASCADES	
REACTOME_ORC1_REMOVAL_FROM_CHROMATIN	
KEGG_APOPTOSIS	
BIOCARTA_CASPASE_PATHWAY	
REACTOME_SCF_SKP2_MEDIATED_DEGRADATION_OF_P27_P21	
REACTOME_ACTIVATED_TLR4_SIGNALING	
REACTOME_MYD88_CASCADE	
REACTOME_DNA_STRAND_ELONGATION	
REACTOME_M_G1_TRANSITION	
REACTOME_HOST_INTERACTIONS_OF_HIV_FACTORS	
KEGG_PROTEASOME	
KEGG_INTESTINAL_IMMUNE_NETWORK_FOR_IGA_PRODUCTION	
REACTOME_COSTIMULATION_BY_THE_CD28_FAMILY	
BIOCARTA_IL10_PATHWAY	
REACTOME_STABILIZATION_OF_P53	
KEGG_DNA_REPLICATION	
BIOCARTA_HIVNEF_PATHWAY	
REACTOME_CYCLIN_E_ASSOCIATED_EVENTS_DURING_G1_S_TRANSITION	
REACTOME_P53_INDEPENDENT_DNA_DAMAGE_RESPONSE	
KEGG_RIG_I_LIKE_RECEPTOR_SIGNALING_PATHWAY	
BIOCARTA_NFKB_PATHWAY	
REACTOME_TOLL_LIKE_RECEPTOR_9_CASCADE	
KEGG_GRAFT_VERSUS_HOST_DISEASE	
BIOCARTA_IL22BP_PATHWAY	
BIOCARTA_GNANULOCYTES_PATHWAY	
BIOCARTA_DEATH_PATHWAY	
BIOCARTA_IL6_PATHWAY	
BIOCARTA_TOLL_PATHWAY	
BIOCARTA_LAIR_PATHWAY	
REACTOME_PEPTIDE_LIGAND_BINDING_RECEPTORS	
REACTOME_SCF_BETA_TRCP_MEDIATED_DEGRADATION_OF_EMI1	
REACTOME_VIF_MEDIATED_DEGRADATION_OF_APOBEC3G	
REACTOME_CDT1_ASSOCIATION_WITH_THE_CDC6_ORC_ORIGIN_COMPLEX	
BIOCARTA_DC_PATHWAY	
REACTOME_CELL_CYCLE_CHECKPOINTS	
REACTOME_EXTENSION_OF_TELOMERES	
BIOCARTA_IL2RB_PATHWAY	
KEGG_ANTIGEN_PROCESSING_AND_PRESENTATION	
REACTOME_INITIAL_TRIGGERING_OF_COMPLEMENT	
BIOCARTA_GLYCOLYSIS_PATHWAY	
BIOCARTA_INFLAM_PATHWAY	

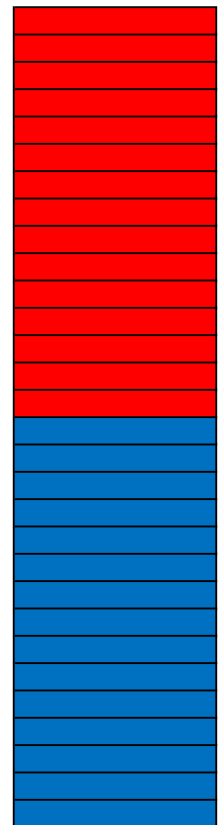
BIOCARTA_NKT_PATHWAY
KEGG_ALLOGRAFT_REJECTION
KEGG_LYSOSOME
REACTOME_TRNA_AMINOACYLATION
BIOCARTA_TNFR2_PATHWAY
KEGG_GALACTOSE_METABOLISM
REACTOME_COMPLEMENT_CASCADE
REACTOME_TCR_SIGNALING
REACTOME_HIV_INFECTION
BIOCARTA_COMP_PATHWAY
BIOCARTA_CTL_PATHWAY
REACTOME_PD1_SIGNALING
REACTOME_UNWINDING_OF_DNA
REACTOME_ACTIVATION_OF_THE_PRE_REPLICATIVE_COMPLEX
BIOCARTA_IL3_PATHWAY
BIOCARTA_CTLA4_PATHWAY
KEGG_COMPLEMENT_AND_COAGULATION_CASCADES
BIOCARTA_HSP27_PATHWAY
REACTOME_METABOLISM_OF_CARBOHYDRATES
KEGG_P53_SIGNALING_PATHWAY
KEGG_FC_GAMMA_R_MEDIATED_PHAGOCYTOSIS
REACTOME_CLASS_A1_RHODOPSIN_LIKE_RECEPTORS
KEGG_PRIMARY_IMMUNODEFICIENCY
REACTOME_REGULATION_OF_ORNITHINE_DECARBOXYLASE
BIOCARTA_IL2_PATHWAY
KEGG_AUTOIMMUNE_THYROID_DISEASE
REACTOME_G_ALPHA_I_SIGNALLING_EVENTS
BIOCARTA_NO2IL12_PATHWAY
REACTOME_GLYCOLYSIS
REACTOME_APOPTOSIS
REACTOME_LAGGING_STRAND_SYNTHESIS
KEGG_AMINOACYL_TRNA_BIOSYNTHESIS
REACTOME_G2_M_CHECKPOINTS
KEGG_FRUCTOSE_AND_MANNANOSE_METABOLISM
BIOCARTA_IL1R_PATHWAY
KEGG_EPITHELIAL_CELL_SIGNALING_IN_HELICOBACTER_PYLORI_INFECTION
REACTOME_TOLL_LIKE_RECEPTOR_3_CASCADE
ST_T_CELL_SIGNAL_TRANSDUCTION
ST_B_CELL_ANTIGEN_RECEPTOR
BIOCARTA_PML_PATHWAY
REACTOME_GENERATION_OF_SECOND_MESSENGER_MOLECULES
BIOCARTA_CLASSIC_PATHWAY
KEGG_ASTHMA
KEGG_STEROID_BIOSYNTHESIS
REACTOME_HUMAN_TAK1_ACTIVATES_NFKB_BY_PHOSPHORYLATION_AND_ACTIVATION_OF_IKKS_COMPLEX
REACTOME_VIRAL_DSRNA_TLR3_TRIF_COMPLEX_ACTIVATES_RIP1
REACTOME_MITOTIC_M_M_G1_PHASES
REACTOME_CD28_DEPENDENT_VAV1_PATHWAY
REACTOME_CHOLESTEROL_BIOSYNTHESIS
REACTOME_POLYMERASE_SWITCHING
KEGG_B_CELL_RECEPTOR_SIGNALING_PATHWAY
REACTOME_SIGNALING_BY_WNT
BIOCARTA_MONOCYTE_PATHWAY
REACTOME_CD28_CO_STIMULATION
BIOCARTA_MITOCHONDRIA_PATHWAY
ST_INTERLEUKIN_4_PATHWAY
BIOCARTA_CYTOKINE_PATHWAY
BIOCARTA_SODD_PATHWAY
REACTOME_GLUCOSE_TRANSPORT
BIOCARTA_RANMS_PATHWAY
BIOCARTA_TCYTOTOXIC_PATHWAY
REACTOME_METAL_ION_SLC_TRANSPORTERS
BIOCARTA_TCRA_PATHWAY
REACTOME_DEATH_RECEPTOR_SIGNALLING
KEGG_AMINO_SUGAR_AND_NUCLEOTIDE_SUGAR_METABOLISM
KEGG_CHRONIC_MYELOID_LEUKEMIA



BIOCARTA_EPONFKB_PATHWAY
BIOCARTA_FAS_PATHWAY
REACTOME_ACTIVATION_OF_ATR_IN_RESPONSE_TO_REPLICATION_STRESS
KEGG_TYPE_I_DIABETES_MELLITUS
REACTOME_GLUconeogenesis
BIOCARTA_TCAPOPTOSIS_PATHWAY
KEGG_FC_EPSILON_RI_SIGNALING_PATHWAY
BIOCARTA_CD40_PATHWAY
REACTOME_INTRINSIC_PATHWAY_FOR_APOPTOSIS
REACTOME_CELL_CYCLE_MITOTIC
BIOCARTA_THELPER_PATHWAY
BIOCARTA_RANKL_PATHWAY
REACTOME_EARLY_PHASE_OF_HIV_LIFE_CYCLE
REACTOME_HEMOSTASIS
KEGG_ACUTE_MYELOID_LEUKEMIA
BIOCARTA_TID_PATHWAY
ST_FAS_SIGNALING_PATHWAY
REACTOME_CDC20_PHOSPHO_APC_MEDIATED_DEGRADATION_OF_CYCLIN_A
REACTOME_UNFOLDED_PROTEIN_RESPONSE
REACTOME_DOWNSTREAM_TCR_SIGNALING
BIOCARTA_EGF_PATHWAY
REACTOME_SIGNALLING_TO_RAS
BIOCARTA_GLEEVEC_PATHWAY
BIOCARTA_TPO_PATHWAY
BIOCARTA_BLYMPHOCYTE_PATHWAY
BIOCARTA_P53_PATHWAY
KEGG_LEUKOCYTE_TRANSENDOTHELIAL_MIGRATION
BIOCARTA_IL7_PATHWAY
BIOCARTA_TNFR1_PATHWAY
REACTOME_REGULATION_OF_APC_ACTIVATORS_BETWEEN_G1_S_AND_EARLY_ANAPHASE
REACTOME_COLLAGEN_MEDIATED_ACTIVATION_CASCADE
REACTOME_AUTODEGRADATION_OF_CDH1_BY_CDH1_APC
REACTOME_REMOVAL_OF_THE_FLAP_INTERMEDIATE
BIOCARTA_RELA_PATHWAY
BIOCARTA_STEM_PATHWAY
REACTOME_TRANSLOCATION_OF_ZAP70_TO_IMMUNOLOGICAL_SYNAPSE
BIOCARTA_TH1TH2_PATHWAY
REACTOME_E2F_TRANSCRIPTIONAL_TARGETS_AT_G1_S
REACTOME_CELL_SURFACE_INTERACTIONS_AT_THE_VASCULAR_WALL
REACTOME_METABLISM_OF_NUCLEOTIDES
BIOCARTA_PDGF_PATHWAY
BIOCARTA_GSK3_PATHWAY
BIOCARTA_EPO_PATHWAY
BIOCARTA_D4GDI_PATHWAY
ST_STAT3_PATHWAY
BIOCARTA_IL5_PATHWAY
REACTOME_NUCLEAR_IMPORT_OF_REV_PROTEIN
KEGG_HEMATOPOIETIC_CELL_LINEAGE
BIOCARTA_ATM_PATHWAY
BIOCARTA_RNA_PATHWAY
REACTOME_REPAIR_SYNTHESIS_OF_PATCH_27_30_BASES_LONG_BY_DNA_POLYMERASE
REACTOME_TRAF6_MEDIATED_INDUCION_OF_THE_ANTIVIRAL_CYTOKINE_IFN_ALPHA_BETA_CASCADE
REACTOME_SYNTHESIS_AND_INTERCONVERSION_OF_NUCLEOTIDE_DI_AND_TRIPHOSPHATES
REACTOME_GLUCOSE_METABOLISM
REACTOME_TRANSMEMBRANE_TRANSPORT_OF_SMALL_MOLECULES
KEGG_BASE_EXCISION_REPAIR
REACTOME_VPR_MEDIATED_NUCLEAR_IMPORT_OF_PICIS
BIOCARTA_ERYTH_PATHWAY
REACTOME_THE_ROLE_OF_NEF_IN_HIV1_REPLICATION_AND_DISEASE_PATHOGENESIS
REACTOME_P75NTR_SIGNALS_VIA_NFKB
REACTOME_REV_MEDIATED_NUCLEAR_EXPORT_OF_HIV1_RNA
REACTOME_TRANSPORT_OF_RIBONUCLEOPROTEINS_INTO_THE_HOST_NUCLEUS
REACTOME_NUCLEOTIDE_LIKE_PURINERGIC_RECEPTORS
REACTOME_CD28_DEPENDENT_PI3K_AKT_SIGNALING
REACTOME_E2F_MEDIATED_REGULATION_OF_DNA_REPLICATION
BIOCARTA_CHEMICAL_PATHWAY



KEGG_PYRIMIDINE_METABOLISM
 KEGG_PRION_DISEASES
 KEGG_NITROGEN_METABOLISM
 KEGG_NEUROTROPHIN_SIGNALING_PATHWAY
 REACTOME_GLUCOSE_AND_OTHER_SUGAR_SLC_TRANSPORTERS
 REACTOME_METABOLISM_OF_AMINO_ACIDS
 BIOCARTA_LYM_PATHWAY
 BIOCARTA_MAPK_PATHWAY
 REACTOME_PHOSPHORYLATION_OF_CD3_AND_TCR_ZETA_CHAINS
 ST_INTERLEUKIN_13_PATHWAY
 REACTOME_SLC_MEDIATED_TRANSMEMBRANE_TRANSPORT
 KEGG_AMYOTROPHIC_LATERAL_SCLEROSIS_ALS
 ST_INTERFERON_GAMMA_PATHWAY
 ST_IL_13_PATHWAY
 BIOCARTA_TCR_PATHWAY
 KEGG_DRUG_METABOLISM_CYTOCHROME_P450
 KEGG_METABOLISM_OF_XENOBIOTICS_BY_CYTOCHROME_P450
 KEGG_VASCULAR_SMOOTH_MUSCLE_CONTRACTION
 REACTOME_PHASE_1_FUNCTIONALIZATION_OF_COMPOUNDS
 KEGG_HEDGEHOG_SIGNALING_PATHWAY
 KEGG_VALINE_LEUCINE_AND_ISOLEUCINE_DEGRADATION
 KEGG_BASAL_CELL_CARCINOMA
 REACTOME_MUSCLE_CONTRACTION
 REACTOME_PHOSPHOLIPASE_CMEDIATED_CASCADE
 KEGG_DILATED_CARDIOMYOPATHY
 REACTOME_MYOGENESIS
 REACTOME_BIOLOGICAL_OXIDATIONS
 KEGG_PROANOATE_METABOLISM
 KEGG_MELANOGENESIS
 REACTOME_FGFR_LIGAND_BINDING_AND_ACTIVATION

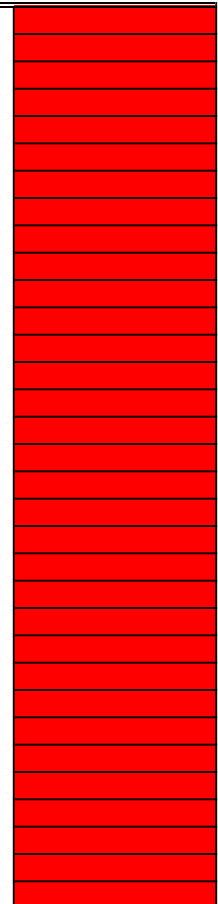


LIVER

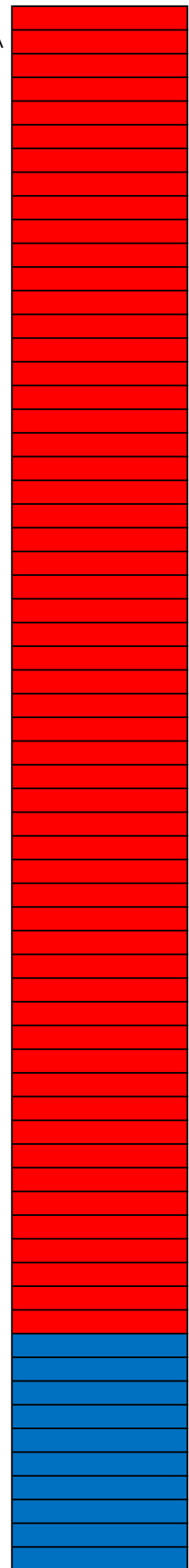
Gene Set

Enrichment Profile

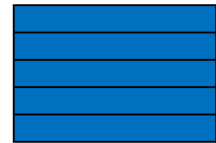
REACTOME_CYTOSOLIC_TRNA_AMINOACYLATION
 BIOCARTA_KERATINOCYTE_PATHWAY
 BIOCARTA_EGF_PATHWAY
 REACTOME_TOLL_RECEPTOR_CASCADES
 BIOCARTA_GSK3_PATHWAY
 BIOCARTA_PDGF_PATHWAY
 REACTOME_TOLL_LIKE_RECEPTOR_4_CASCADE
 BIOCARTA_IL6_PATHWAY
 BIOCARTA_ATM_PATHWAY
 BIOCARTA_MAPK_PATHWAY
 REACTOME_ACTIVATED_TLR4_SIGNALLING
 BIOCARTA_41BB_PATHWAY
 BIOCARTA_NFKB_PATHWAY
 BIOCARTA_RELA_PATHWAY
 KEGG_TOLL_LIKE_RECEPTOR_SIGNALING_PATHWAY
 REACTOME_INNATE_IMMUNITY_SIGNALING
 BIOCARTA_TOLL_PATHWAY
 REACTOME_TOLL_LIKE_RECEPTOR_9_CASCADE
 REACTOME_TOLL_LIKE_RECEPTOR_3_CASCADE
 KEGG_RIG_I_LIKE_RECEPTOR_SIGNALING_PATHWAY
 BIOCARTA_HER2_PATHWAY
 REACTOME_NUCLEAR_IMPORT_OF_REV_PROTEIN
 BIOCARTA_MET_PATHWAY
 KEGG_MAPK_SIGNALING_PATHWAY
 ST_JNK_MAPK_PATHWAY
 BIOCARTA_TNFR2_PATHWAY
 REACTOME_SIGNALING_IN_IMMUNE_SYSTEM
 BIOCARTA_GLEEVEC_PATHWAY
 BIOCARTA_TPO_PATHWAY
 REACTOME_METAL_ION_SLC_TRANSPORTERS
 BIOCARTA_INSULIN_PATHWAY
 BIOCARTA_VEGF_PATHWAY
 REACTOME_GLUCOSE_TRANSPORT



REACTOME_MYD88_CASCADE
REACTOME_REGULATION_OF_LIPID_METABOLISM_BY_PEROXISOME_PROLIFERATOR_ACTIVATED_RECEPTOR_ALPHA
BIOCARTA_RANKL_PATHWAY
REACTOME_TRAF6_MEDIATED_INDUCION_OF_THE_ANTIVIRAL_CYTOKINE_IFN_ALPHA_BETA_CASCADE
REACTOME_REGULATION_OF_GLUCOKINASE_BY_GLUCOKINASE_REGULATORY_PROTEIN
REACTOME_TIE2_SIGNALING
BIOCARTA_IL22BP_PATHWAY
BIOCARTA_ARENRF2_PATHWAY
BIOCARTA_P38MAPK_PATHWAY
BIOCARTA_NTHI_PATHWAY
BIOCARTA_TOB1_PATHWAY
REACTOME_TRNA_AMINOACYLATION
REACTOME_NEP_NS2_INTERACTS_WITH_THE_CELLULAR_EXPORT_MACHINERY
KEGG_JAK_STAT_SIGNALING_PATHWAY
REACTOME_MAPK_TARGETS_NUCLEAR_EVENTS_MEDIATED_BY_MAP_KINASES
KEGG_RENAL_CELL_CARCINOMA
BIOCARTA_PML_PATHWAY
REACTOME_GAB1_SIGNALOSOME
REACTOME_DOWNSTREAM_TCR_SIGNALING
REACTOME_MAP_KINASES_ACTIVATION_IN_TLR_CASCADE
ST_INTERLEUKIN_4_PATHWAY
BIOCARTA_IL1R_PATHWAY
REACTOME_SIGNALING_BY_EGFR
KEGG_DORSO_VENTRAL_AXIS_FORMATION
REACTOME_COMMON_PATHWAY
BIOCARTA_CDMAC_PATHWAY
REACTOME_REV_MEDIATED_NUCLEAR_EXPORT_OF_HIV1_RNA
REACTOME_TRANSPORT_OF_RIBONUCLEOPROTEINS_INTO_THE_HOST_NUCLEUS
BIOCARTA_CTCF_PATHWAY
BIOCARTA_LYM_PATHWAY
BIOCARTA_IL2_PATHWAY
KEGG_LEISHMANIA_INFECTION
KEGG_ERBB_SIGNALING_PATHWAY
KEGG_EPITHELIAL_CELL_SIGNALING_IN_HELICOBACTER_PYLORI_INFECTION
REACTOME_GRB2_SOS_PROVIDES_LINKAGE_TO_MAPK_SIGNALING_FOR_INTERGRINS_
REACTOME_P75NTR_SIGNALS_VIA_NFKB
BIOCARTA_STRESS_PATHWAY
BIOCARTA_MTOR_PATHWAY
REACTOME_PI3K_AKT_SIGNALLING
REACTOME_DOWN_STREAM_SIGNAL_TRANSDUCTION
REACTOME_TRANSPORT_OF_THE_SLBP_INDEPENDENT_MATURE_MRNA
BIOCARTA_RNA_PATHWAY
KEGG_CYTOSOLIC_DNA_SENSING_PATHWAY
REACTOME_GENE_EXPRESSION
ST_GA13_PATHWAY
BIOCARTA_CARDIACEGF_PATHWAY
REACTOME_VIRAL_DSRNA_TLR3_TRIF_COMPLEX_ACTIVATES_RIP1
REACTOME_G_ALPHA_12_13_SIGNALLING_EVENTS
BIOCARTA_IGF1_PATHWAY
BIOCARTA_AT1R_PATHWAY
ST_G_ALPHA_I_PATHWAY
BIOCARTA_HIF_PATHWAY
KEGG_PROSTATE_CANCER
ST_DIFFERENTIATION_PATHWAY_IN_PC12_CELLS
REACTOME_HUMAN_TAK1_ACTIVATES_NFKB_BY_PHOSPHORYLATION_AND_ACTIVATION_OF_IKKS_COMPLEX
KEGG_ADHERENS_JUNCTION
REACTOME_ELECTRON_TRANSPORT_CHAIN
KEGG_PROTEIN_EXPORT
REACTOME_PHASE_1_FUNCTIONALIZATION_OF_COMPOUNDS
KEGG_PARKINSONS_DISEASE
REACTOME_CYTOCHROME_P450_ARRANGED_BY_SUBSTRATE_TYPE
REACTOME_SYNTHESIS_OF_BILE_ACIDS_AND_BILE_SALTS
KEGG_PRIMARY_BILE_ACID_BIOSYNTHESIS
KEGG_STEROID_HORMONE_BIOSYNTHESIS
REACTOME_POST_CHAPERONIN_TUBULIN_FOLDING_PATHWAY
REACTOME_FORMATION_OF_TUBULIN_FOLDING_INTERMEDIATES_BY_CCT_TRIC



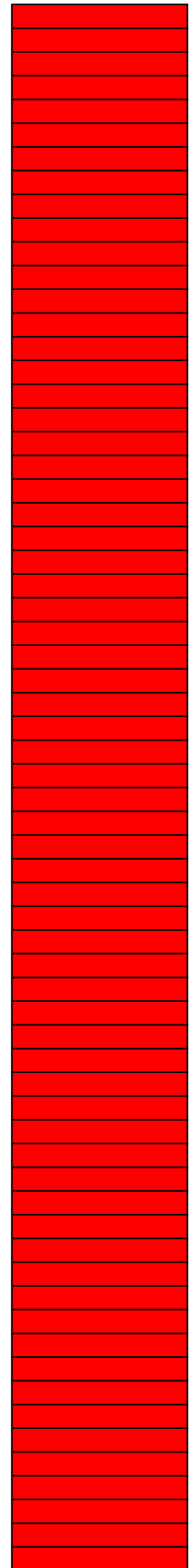
REACTOME_METABOLISM_OF_BILE_ACIDS_AND_BILE_SALTS
 REACTOME_SYNTHESIS_OF_BILE_ACIDS_AND_BILE_SALTS_VIA_7ALPHA_HYDROXYCHOLESTEROL
 KEGG_OXIDATIVE_PHOSPHORYLATION
 REACTOME_ENDOGENOUS_STEROLS
 REACTOME_AMINE_DERIVED_HORMONES



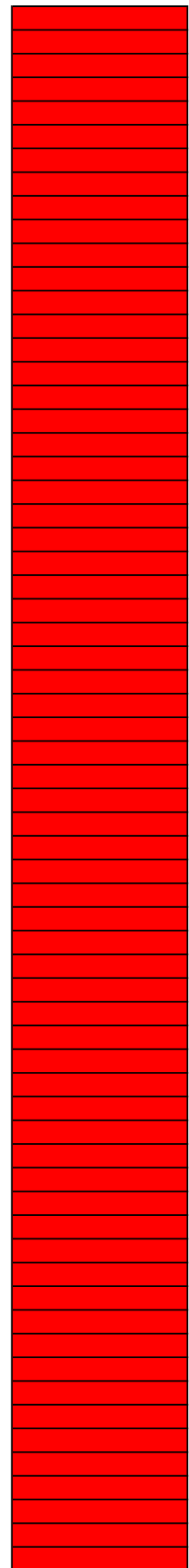
KIDNEY

Gene Set	Enrichment Profile
BIOCARTA_EGF_PATHWAY	
REACTOME_CYTOSOLIC_TRNA_AMINOACYLATION	
BIOCARTA_GSK3_PATHWAY	
BIOCARTA_MAPK_PATHWAY	
REACTOME_TRAF6_MEDIATED_INDUCION_OF_THE_ANTIVIRAL_CYTOKINE_IFN_ALPHA_BETA_CASCADE	
REACTOME_TOLL_LIKE_RECEPTOR_3_CASCADE	
BIOCARTA_PDGF_PATHWAY	
REACTOME_MAP_KINASES_ACTIVATION_IN_TLR_CASCADE	
ST_JNK_MAPK_PATHWAY	
KEGG_ADHERENS_JUNCTION	
KEGG_CHRONIC_MYELOID_LEUKEMIA	
KEGG_ERBB_SIGNALING_PATHWAY	
REACTOME_TOLL_RECEPTOR_CASCADES	
KEGG_JAK_STAT_SIGNALING_PATHWAY	
BIOCARTA_IL6_PATHWAY	
ST_DIFFERENTIATION_PATHWAY_IN_PC12_CELLS	
REACTOME_MAPK_TARGETS_NUCLEAR_EVENTS_MEDIATED_BY_MAP_KINASES	
BIOCARTA_TGFB_PATHWAY	
BIOCARTA_TPO_PATHWAY	
BIOCARTA_MET_PATHWAY	
BIOCARTA_INSULIN_PATHWAY	
ST_PHOSPHOINOSITIDE_3_KINASE_PATHWAY	
BIOCARTA_CTCF_PATHWAY	
BIOCARTA_GLEEVEC_PATHWAY	
REACTOME_SIGNALING_BY_EGFR	
KEGG_DORSO_VENTRAL_AXIS_FORMATION	
REACTOME_SIGNALLING_BY_NGF	
BIOCARTA_PPARA_PATHWAY	
KEGG_NEUROTROPHIN_SIGNALING_PATHWAY	
REACTOME_TRANSPORT_OF_RIBONUCLEOPROTEINS_INTO_THE_HOST_NUCLEUS	
REACTOME_BETACATENIN_PHOSPHORYLATION_CASCADE	
BIOCARTA_TNFR2_PATHWAY	
KEGG_ACUTE_MYELOID_LEUKEMIA	
KEGG_PATHOGENIC_ESCHERICHIA_COLI_INFECTON	
KEGG_RENAL_CELL_CARCINOMA	
BIOCARTA_SPRY_PATHWAY	
KEGG_MAPK_SIGNALING_PATHWAY	
BIOCARTA_RACCYCD_PATHWAY	
BIOCARTA_VEGF_PATHWAY	
BIOCARTA_AT1R_PATHWAY	
BIOCARTA_CARDIACEGF_PATHWAY	
REACTOME_HUMAN_TAK1_ACTIVATES_NFKB_BY_PHOSPHORYLATION_AND_ACTIVATION_OF_IKKS_COMPLEX	
BIOCARTA_NGF_PATHWAY	
REACTOME_JNK_PHOSPHORYLATION_AND_ACTIVATION_MEDIATED_BY_ACTIVATED_HUMAN_TAK1	
KEGG_PANCREATIC_CANCER	
REACTOME_DOWNSTREAM_TCR_SIGNALING	
BIOCARTA_MTOR_PATHWAY	
REACTOME_G_ALPHA_12_13_SIGNALLING_EVENTS	
BIOCARTA_IL2RB_PATHWAY	
REACTOME_P75NTR_SIGNALS_VIA_NFKB	
REACTOME_PI3K_AKT_SIGNALLING	
BIOCARTA_WNT_PATHWAY	
BIOCARTA_P53_PATHWAY	
REACTOME_NUCLEAR_IMPORT_OF_REV_PROTEIN	
BIOCARTA_PTEN_PATHWAY	
BIOCARTA_P53HYPOXIA_PATHWAY	
BIOCARTA_KERATINOCYTE_PATHWAY	
REACTOME_VPR_MEDIATED_NUCLEAR_IMPORT_OF_PICS	

BIOCARTA_P38MAPK_PATHWAY
ST_GRANULE_CELL_SURVIVAL_PATHWAY
REACTOME_IRS_RELATED_EVENTS
KEGG_ENDOMETRIAL_CANCER
ST_FAS_SIGNALING_PATHWAY
BIOCARTA_IL22BP_PATHWAY
REACTOME_NUCLEAR_EVENTS_KINASE_AND_TRANSCRIPTION_FACTOR_ACTIVATION
BIOCARTA_CD40_PATHWAY
KEGG_SMALL_CELL_LUNG_CANCER
REACTOME_SIGNALING_BY_TGF_BETA
ST_GA13_PATHWAY
BIOCARTA_LYM_PATHWAY
REACTOME_NOTCH_HLH_TRANSCRIPTION_PATHWAY
REACTOME_CELLEXTRACELLULAR_MATRIX_INTERACTIONS
KEGG_COLORECTAL_CANCER
KEGG_TIGHT_JUNCTION
BIOCARTA_HER2_PATHWAY
REACTOME_INNATE_IMMUNITY_SIGNALING
KEGG_PROSTATE_CANCER
REACTOME_EGFR_DOWNREGULATION
REACTOME_REGULATION_OF_GLUKOKINASE_BY_GLUKOKINASE_REGULATORY_PROTEIN
REACTOME_SIGNALING_IN_IMMUNE_SYSTEM
REACTOME_VIRAL_DSRNA_TLR3_TRIF_COMPLEX_ACTIVATES_RIP1
BIOCARTA_ATM_PATHWAY
BIOCARTA_41BB_PATHWAY
KEGG_REGULATION_OF_ACTIN_CYTOSKELETON
BIOCARTA_EPO_PATHWAY
KEGG_INOSITOL_PHOSPHATE_METABOLISM
REACTOME_TRNA_AMINOACYLATION
REACTOME_APOPTOTIC_EXECUTION_PHASE
KEGG_CIRCADIAN_RHYTHM_MAMMAL
BIOCARTA_MONOCYTE_PATHWAY
ST_TUMOR_NECROSIS_FACTOR_PATHWAY
REACTOME_ERKS_ARE_INACTIVATED
KEGG_FATTY_ACID_METABOLISM
BIOCARTA_IGF1_PATHWAY
BIOCARTA_IL7_PATHWAY
BIOCARTA_ERK5_PATHWAY
ST_INTERLEUKIN_4_PATHWAY
REACTOME_SIGNALING_BY_BMP
BIOCARTA_FIBRINOLYSIS_PATHWAY
KEGG_TGF_BETA_SIGNALING_PATHWAY
KEGG_TOLL_LIKE_RECEPTOR_SIGNALING_PATHWAY
BIOCARTA_TCR_PATHWAY
BIOCARTA_TOLL_PATHWAY
BIOCARTA_FCER1_PATHWAY
BIOCARTA_EPONFKB_PATHWAY
BIOCARTA_CXCR4_PATHWAY
BIOCARTA_CDMAC_PATHWAY
BIOCARTA_CREB_PATHWAY
BIOCARTA_RELA_PATHWAY
KEGG_WNT_SIGNALING_PATHWAY
REACTOME_TRANSPORT_OF_MATURE_MRNA_DERIVED_FROM_AN_INTRON_CONTAINING_TRANSCRIPT
BIOCARTA_NFKB_PATHWAY
KEGG_MTOR_SIGNALING_PATHWAY
REACTOME_ERK_MAPK_TARGETS
KEGG_NON_SMALL_CELL_LUNG_CANCER
BIOCARTA_RANKL_PATHWAY
KEGG_LEUKOCYTE_TRANSENDOTHELIAL_MIGRATION
BIOCARTA_ALK_PATHWAY
REACTOME_NEP_NS2_INTERACTS_WITH_THE_CELLULAR_EXPORT_MACHINERY
REACTOME_TCR_SIGNALING
KEGG_PATHWAYS_IN_CANCER
REACTOME_CELL_JUNCTION_ORGANIZATION
REACTOME_SIGNAL_ATTENUATION
BIOCARTA_IGF1R_PATHWAY



BIOCARTA_VIP_PATHWAY
BIOCARTA_PITX2_PATHWAY
KEGG_LEISHMANIA_INFECTION
BIOCARTA_GH_PATHWAY
REACTOME_DOWN_STREAM_SIGNAL_TRANSDUCTION
REACTOME_AMINO_ACID_TRANSPORT_ACROSS_THE_PLASMA_MEMBRANE
ST_B_CELL_ANTIGEN_RECEPTOR
BIOCARTA_NTHI_PATHWAY
KEGG_GLIOMA
BIOCARTA_ARENRF2_PATHWAY
REACTOME_P75_NTR_RECEPTOR_MEDIATED_SIGNALLING
BIOCARTA_TRKA_PATHWAY
BIOCARTA_INTEGRIN_PATHWAY
REACTOME_NF_KB_IS_ACTIVATED_AND_SIGNALS_SURVIVAL
BIOCARTA_PAR1_PATHWAY
REACTOME_GAB1_SIGNALOSOME
BIOCARTA_ARF_PATHWAY
REACTOME_GLUCOSE_TRANSPORT
BIOCARTA_EIF_PATHWAY
BIOCARTA_EDG1_PATHWAY
BIOCARTA_LAIR_PATHWAY
BIOCARTA_GRANULOCYTES_PATHWAY
REACTOME_PROCESSING_OF_CAPPED_INTRON_CONTAINING_PRE_MRNA
REACTOME_OTHER_SEMAPHORIN_INTERACTIONS
REACTOME_REV_MEDIATED_NUCLEAR_EXPORT_OF_HIV1_RNA
BIOCARTA_IGF1MTOR_PATHWAY
BIOCARTA_ERK_PATHWAY
KEGG_PROXIMAL_TUBULE_BICARBONATE_RECLAMATION
KEGG_LYSINE_DEGRADATION
BIOCARTA_DREAM_PATHWAY
BIOCARTA_HIVNEF_PATHWAY
REACTOME_SEMAPHORIN_INTERACTIONS
KEGG_AMINOACYL_TRNA_BIOSYNTHESIS
KEGG_FC_GAMMA_R_MEDIATED_PHAGOCYTOSIS
KEGG_B_CELL_RECEPTOR_SIGNALING_PATHWAY
BIOCARTA_EIF4_PATHWAY
BIOCARTA_ECM_PATHWAY
REACTOME_GENERIC_TRANSCRIPTION_PATHWAY
KEGG_T_CELL_RECEPTOR_SIGNALING_PATHWAY
BIOCARTA_AGR_PATHWAY
REACTOME_TRKA_SIGNALLING_FROM_THE_PLASMA_MEMBRANE
REACTOME_P75NTR_RECRUITS_SIGNALLING_COMPLEXES
REACTOME_MITOCHONDRIAL_FATTY_ACID_BETA_OXIDATION
REACTOME_NRAGE_SIGNALS_DEATH_THROUGH_JNK
BIOCARTA_IL2_PATHWAY
KEGG_PHOSPHATIDYLINOSITOL_SIGNALING_SYSTEM
REACTOME_GENE_EXPRESSION
ST_ERK1_ERK2_MAPK_PATHWAY
BIOCARTA_EIF2_PATHWAY
REACTOME_APOPTOTIC_CLEAVAGE_OF_CELL_ADHESION_PROTEINS
KEGG_APOPTOSIS
BIOCARTA_RNA_PATHWAY
REACTOME_SEMA4D_INDUCED_CELL_MIGRATION_AND_GROWTH_CONE_COLLAPSE
REACTOME_SEMA4D_IN_SEMAPHORIN_SIGNALING
BIOCARTA_BCELLSURVIVAL_PATHWAY
REACTOME_APOPTOSIS_INDUCED_DNA_FRAGMENTATION
BIOCARTA_CDC42RAC_PATHWAY
KEGG_ENDOCYTOSIS
REACTOME_DEADENYLATION_OF_MRNA
REACTOME_CELL_SURFACE_INTERACTIONS_AT_THE_VASCULAR_WALL
REACTOME_AMINO_ACID_SYNTHESIS_AND_INTERCONVERSION
KEGG_THYROID_CANCER
REACTOME_CELL_DEATH_SIGNALLING_VIA_NRAGE_NRIF_AND_NADE
REACTOME_COSTIMULATION_BY_THE_CD28_FAMILY
KEGG_ADIPOCYTOKINE_SIGNALING_PATHWAY
KEGG_INSULIN_SIGNALING_PATHWAY



REACTOME_ACTIVATED_AMPK_STIMULATES_FATTY_ACID_OXIDATION_IN_MUSCLE
BIOCARTA_IL3_PATHWAY
REACTOME_MRNA_3_END_PROCESSING
BIOCARTA_VITCB_PATHWAY
REACTOME_CD28_CO_STIMULATION
BIOCARTA_PTDINS_PATHWAY
REACTOME_SPHINGOLIPID_METABOLISM
REACTOME_SHC_RELATED_EVENTS
BIOCARTA_ETS_PATHWAY
REACTOME_REGULATION_OF_RHEB_GTPASE_ACTIVITY_BY_AMPK
BIOCARTA_IL1R_PATHWAY
REACTOME_MTOR_SIGNALLING
KEGG_NOTCH_SIGNALING_PATHWAY
KEGG_NITROGEN_METABOLISM
REACTOME_CHOLESTEROL_BIOSYNTHESIS
REACTOME_ELECTRON_TRANSPORT_CHAIN
REACTOME_STEROID_METABOLISM
REACTOME_NCAM1_INTERACTIONS
KEGG_OXIDATIVE_PHOSPHORYLATION
KEGG_RIBOSOME
KEGG_TERPENOID_BACKBONE_BIOSYNTHESIS
KEGG_PARKINSONS_DISEASE
KEGG_PROTEIN_EXPORT
REACTOME_TRANSFORMATION_OF_LANOSTEROL_TO_CHOLESTEROL
REACTOME_VIRAL_MRNA_TRANSLATION
KEGG_PYRIMIDINE_METABOLISM
REACTOME_INFLUENZA_VIRAL_RNA_TRANSCRIPTION_AND_REPLICATION
REACTOME_PEPTIDE_CHAIN_ELONGATION
REACTOME_REGULATION_OF_GENE_EXPRESSION_IN_BETA_CELLS
REACTOME_FORMATION_OF_THE_EARLY_ELONGATION_COMPLEX
KEGG_DNA_REPLICATION
REACTOME_INSULIN_SYNTHESIS_AND_SECRETION

