Pathway Group: m2.all.v2024.1.Mm.entrez subset022 expression levels normalized per row (pathway) REACTOME_REGULATION_OF_TP53_ACTIVITY_THROUGH_ASSOCIATION_WITH_CO_FACTORS REACTOME_REGULATION_OF_LOCALIZATION_OF_FOXO_TRANSCRIPTION_FACTORS REACTOME_REGULATION_OF_FOXO_TRANSCRIPTIONAL_ACTIVITY_BY_ACETYLATION REACTOME_RECYCLING_OF_BILE_ACIDS_AND_SALTS REACTOME_REACTIONS_SPECIFIC_TO_THE_COMPLEX_N_GLYCAN_SYNTHESIS_PATHWAY REACTOME_REPRODUCTION | REACTOME_REGULATION_OF_GENE_EXPRESSION_BY_HYPOXIA_INDUCIBLE_FACTOR | REACTOME_REGULATION_OF_BACH1_ACTIVITY REACTOME_REGULATION_OF_TP53_DEGRADATION | REACTOME_REGULATION_OF_TP53_ACTIVITY_THROUGH_METHYLATION | REACTOME_RHO_GTPASES_ACTIVATE_CIT REACTOME_REGULATION_OF_APC_C_ACTIVATORS_BETWEEN_G1_S_AND_EARLY_ANAPHASE REACTOME_RESOLUTION_OF_SISTER_CHROMATID_COHESION REACTOME_RHO_GTPASES_ACTIVATE_FORMINS REACTOME_REGULATION_OF_PLK1_ACTIVITY_AT_G2_M_TRANSITION REACTOME_REGULATION_OF_TP53_ACTIVITY REACTOME_REGULATION_OF_TP53_ACTIVITY_THROUGH_PHOSPHORYLATION REACTOME_RESOLUTION_OF_D_LOOP_STRUCTURES REACTOME_RESOLUTION_OF_AP_SITES_VIA_THE_MULTIPLE_NUCLEOTIDE_PATCH_REPLACEMENT_PATHWAY REACTOME_RECOGNITION_OF_DNA_DAMAGE_BY_PCNA_CONTAINING_REPLICATION_COMPLEX REACTOME_RESOLUTION_OF_ABASIC_SITES_AP_SITES REACTOME_REGULATION_OF_ENDOGENOUS_RETROELEMENTS ||REACTOME_RHOBTB2_GTPASE_CYCLE ||REACTOME_RHOBTB_GTPASE_CYCLE | REACTOME_RHOBTB1_GTPASE_CYCLE REACTOME_REGULATION_OF_TP53_ACTIVITY_THROUGH_ACETYLATION REACTOME_REGULATION_OF_LIPID_METABOLISM_BY_PPARALPHA ||REACTOME_REGULATION_OF_PTEN_LOCALIZATION REACTOME_REGULATION_OF_MITF_M_DEPENDENT_GENES_INVOLVED_IN_CELL_CYCLE_AND_PROLIFERATION REACTOME_REPRESSION_OF_WNT_TARGET_GENES REACTOME_RHOJ_GTPASE_CYCLE | REACTOME_RHO_GTPASES_ACTIVATE_PKNS REACTOME_REGULATION_BY_C_FLIP REACTOME_REGULATED_NECROSIS REACTOME_REGULATION_OF_TBK1_IKK_IKBKE_MEDIATED_ACTIVATION_OF_IRF3_IRF7 REACTOME_REGULATED_PROTEOLYSIS_OF_P75NTR REACTOME_REGULATION_OF_CYTOSKELETAL_REMODELING_AND_CELL_SPREADING_BY_IPP_COMPLEX_COMPONENTS REACTOME_RHOA_GTPASE_CYCLE REACTOME_RHOG_GTPASE_CYCLE REACTOME_RAC3_GTPASE_CYCLE REACTOME_REGULATION_OF_RUNX1_EXPRESSION_AND_ACTIVITY REACTOME_RHOF_GTPASE_CYCLE REACTOME_RHOD_GTPASE_CYCLE REACTOME_RHOQ_GTPASE_CYCLE REACTOME_RHOB_GTPASE_CYCLE REACTOME_RHOC_GTPASE_CYCLE REACTOME_REGULATION_OF_INNATE_IMMUNE_RESPONSES_TO_CYTOSOLIC_DNA REACTOME_RHOH_GTPASE_CYCLE REACTOME_REGULATION_OF_KIT_SIGNALING Pathologist major category REACTOME_REGULATION_OF_IFNG_SIGNALING Nerve sheath tumors Spindle and epithelioid tumors REACTOME_REGULATION_OF_TNFR1_SIGNALING Glioneuronal tumors REACTOME_REGULATION_OF_NF_KAPPA_B_SIGNALING No evidence of disease REACTOME_REGULATION_OF_IFNA_IFNB_SIGNALING nf1 KO; pten KO; ink KO; atrx KO REACTOME_REGULATION_OF_EXPRESSION_OF_SLITS_AND_ROBOS nf1 KO; pten KO; ink KO; atrx wt
nf1 wt; pten KO; ink KO; atrx KO
nf1 wt; pten wt; ink wt; atrx wt REACTOME_RHO_GTPASES_ACTIVATE_NADPH_OXIDASES REACTOME_RESPONSE_TO_ELEVATED_PLATELET_CYTOSOLIC_CA2 REACTOME_REGULATION_OF_INSULIN_LIKE_GROWTH_FACTOR_IGF_TRANSPORT_AND_UPTAKE_BY_INSULIN_LIKE_GROWTH_FACTOR_BINDING_PROTEINS_IGFBPS |REACTOME_REGULATION_OF_TLR_BY_ENDOGENOUS_LIGAND REACTOME_REGULATION_OF_MRNA_STABILITY_BY_PROTEINS_THAT_BIND_AU_RICH_ELEMENTS ||REACTOME_REGULATION_OF_RUNX3_EXPRESSION_AND_ACTIVITY | REACTOME_REGULATION_OF_PTEN_STABILITY_AND_ACTIVITY | REACTOME_REGULATION_OF_RUNX2_EXPRESSION_AND_ACTIVITY REACTOME_REGULATION_OF_CDH11_FUNCTION REACTOME_REGULATION_OF_CDH11_EXPRESSION_AND_FUNCTION REACTOME_RA_BIOSYNTHESIS_PATHWAY REACTOME_REGULATION_OF_FZD_BY_UBIQUITINATION | REACTOME_RHO_GTPASES_ACTIVATE_PAKS REACTOME_RET_SIGNALING REACTOME_RELEASE_OF_HH_NP_FROM_THE_SECRETING_CELL | REACTOME_RHO_GTPASES_ACTIVATE_KTN1 REACTOME_RECYCLING_PATHWAY_OF_L1 REACTOME_RECEPTOR_TYPE_TYROSINE_PROTEIN_PHOSPHATASES | REACTOME_RAF_ACTIVATION REACTOME_REDUCTION_OF_CYTOSOLIC_CA_LEVELS REACTOME_REGULATION_OF_INSULIN_SECRETION REACTOME_RAP1_SIGNALLING REACTOME_REELIN_SIGNALLING_PATHWAY REACTOME_RAS_PROCESSING REACTOME_RECEPTOR_MEDIATED_MITOPHAGY | REACTOME_REGULATION_OF_PTEN_GENE_TRANSCRIPTION REACTOME_RESPIRATORY_ELECTRON_TRANSPORT REACTOME_RHOBTB3_ATPASE_CYCLE REACTOME_RELAXIN_RECEPTORS REACTOME_REGULATION_OF_MITF_M_DEPENDENT_GENES_INVOLVED_IN_PIGMENTATION REACTOME_REVERSIBLE_HYDRATION_OF_CARBON_DIOXIDE REACTOME_REGULATION_OF_PYRUVATE_DEHYDROGENASE_PDH_COMPLEX REACTOME_REGULATION_OF_PYRUVATE_METABOLISM REACTOME_RETROGRADE_NEUROTROPHIN_SIGNALLING REACTOME_RETROGRADE_TRANSPORT_AT_THE_TRANS_GOLGI_NETWORK REACTOME_RHO_GTPASES_ACTIVATE_IQGAPS REACTOME_REGULATION_OF_RAS_BY_GAPS REACTOME_RELEASE_OF_APOPTOTIC_FACTORS_FROM_THE_MITOCHONDRIA REACTOME_RAF_INDEPENDENT_MAPK1_3_ACTIVATION REACTOME_RHOV_GTPASE_CYCLE REACTOME_RHOU_GTPASE_CYCLE REACTOME_REGULATION_OF_SIGNALING_BY_CBL | REACTOME_REGULATION_OF_CHOLESTEROL_BIOSYNTHESIS_BY_SREBP_SREBF REACTOME_REGULATION_OF_HSF1_MEDIATED_HEAT_SHOCK_RESPONSE

REACTOME_RECRUITMENT_OF_NUMA_TO_MITOTIC_CENTROSOMES

| REACTOME_RECYCLING_OF_EIF2_GDP