Pathway Group: m5.go.v2024.1.Mm.entrez subset076 expression levels normalized per row (pathway) Pathologist subcategory Resultant genotype GOBP_TRNA_PSEUDOURIDINE_SYNTHESIS | GOBP_TRNA_SURVEILLANCE GOBP_TRNA_THIO_MODIFICATION GOBP_TRNA_THREONYLCARBAMOYLADENOSINE_METABOLIC_PROCESS GOBP_TRNA_THREONYLCARBAMOYLADENOSINE_MODIFICATION | GOBP_TRNA_TRANSCRIPTION | GOBP_TRNA_TRANSPORT GOBP_TRNA_WOBBLE_BASE_MODIFICATION GOBP_TRNA_WOBBLE_URIDINE_MODIFICATION GOBP_TROPHECTODERMAL_CELL_DIFFERENTIATION GOBP_TROPHECTODERMAL_CELL_PROLIFERATION GOBP_TROPHOBLAST_CELL_MIGRATION GOBP_TROPHOBLAST_GIANT_CELL_DIFFERENTIATION GOBP_TRUNK_SEGMENTATION GOBP_TRYPTOPHAN_CATABOLIC_PROCESS_TO_KYNURENINE GOBP_TRYPTOPHAN_METABOLIC_PROCESS GOBP_TRYPTOPHAN_TRANSPORT GOBP_TUBE_DEVELOPMENT GOBP_TUBE_FORMATION GOBP_TUBE_LUMEN_CAVITATION GOBP_TUBE_MORPHOGENESIS | GOBP_TUBULIN_COMPLEX_ASSEMBLY | GOBP_TUBULIN_DEACETYLATION GOBP_TUMOR_NECROSIS_FACTOR_MEDIATED_SIGNALING_PATHWAY GOBP_TUMOR_NECROSIS_FACTOR_SUPERFAMILY_CYTOKINE_PRODUCTION GOBP_TYPE_2_IMMUNE_RESPONSE GOBP_TYPE_B_PANCREATIC_CELL_APOPTOTIC_PROCESS GOBP_TYPE_B_PANCREATIC_CELL_DEVELOPMENT GOBP_TYPE_B_PANCREATIC_CELL_DIFFERENTIATION GOBP_TYPE_B_PANCREATIC_CELL_PROLIFERATION GOBP_TYPE_I_HYPERSENSITIVITY GOBP_TYPE_I_INTERFERON_PRODUCTION | GOBP_TYPE_I_PNEUMOCYTE_DIFFERENTIATION GOBP_TYPE_II_HYPERSENSITIVITY GOBP_TYPE_II_INTERFERON_MEDIATED_SIGNALING_PATHWAY GOBP_TYPE_II_INTERFERON_PRODUCTION GOBP_TYPE_II_PNEUMOCYTE_DIFFERENTIATION GOBP_TYPE_IV_HYPERSENSITIVITY GOBP_TYROSINE_CATABOLIC_PROCESS GOBP_TYROSINE_PHOSPHORYLATION_OF_STAT_PROTEIN Pathologist grade GOBP_U2_TYPE_PRESPLICEOSOME_ASSEMBLY GOBP_U4_SNRNA_3_END_PROCESSING GOBP_UBIQUINONE_METABOLIC_PROCESS | GOBP_UBIQUITIN_DEPENDENT_ENDOCYTOSIS Pathologist major category GOBP_UBIQUITIN_DEPENDENT_GLYCOPROTEIN_ERAD_PATHWAY Nerve sheath tumors Spindle and epithelioid tumors | GOBP_UBIQUITIN_DEPENDENT_PROTEIN_CATABOLIC_PROCESS_VIA_THE_C_END_DEGRON_RULE_PATHWAY | GOBP_UBIQUITIN_DEPENDENT_PROTEIN_CATABOLIC_PROCESS_VIA_THE_MULTIVESICULAR_BODY_SORTING_PATHWAY Glioneuronal tumors No evidence of disease | GOBP_UBIQUITIN_INDEPENDENT_PROTEIN_CATABOLIC_PROCESS_VIA_THE_MULTIVESICULAR_BODY_SORTING_PATHWAY Pathologist subcategory GOBP_UBIQUITIN_RECYCLING Nerve sheath tumor, low grade with adenoid feat. Nerve sheath tumor, low grade Nerve sheath tumor, high grade Spindle and epithelioid tumor, high grade Spindle and epithelioid tumor, high grade w/ osteoid feat. Astrocytoma, diffuse, low–grade (Grade 2) Astrocytoma, Grade 3 Astrocytoma, Grade 4 Glioblastoma (GRM) GOBP_UDP_N_ACETYLGLUCOSAMINE_BIOSYNTHETIC_PROCESS GOBP_UDP_N_ACETYLGLUCOSAMINE_METABOLIC_PROCESS GOBP_UMP_BIOSYNTHETIC_PROCESS GOBP_UMP_CATABOLIC_PROCESS Glioblastoma (GBM) Glioblastoma (GBM) w/ spindle–cell component Astrocytoma, Grade 4, leptomeningeal glioma Glioneuronal tumor, diffuse low grade (DLGNT) Glioneuronal tumor, NOS GOBP_UNIDIMENSIONAL_CELL_GROWTH GOBP_UNSATURATED_FATTY_ACID_BIOSYNTHETIC_PROCESS GOBP_UNSATURATED_FATTY_ACID_METABOLIC_PROCESS No evidence of disease GOBP_URATE_METABOLIC_PROCESS GOBP_URATE_TRANSPORT Resultant genotype nf1 KO; pten KO; ink KO; atrx KO nf1 KO; pten KO; ink KO; atrx wt nf1 wt; pten KO; ink KO; atrx KO GOBP_UREA_TRANSMEMBRANE_TRANSPORT GOBP_UREA_TRANSPORT nf1 wt; pten wt; ink wt; atrx wt GOBP_URETER_DEVELOPMENT GOBP_URETER_MORPHOGENESIS GOBP_URETERIC_BUD_ELONGATION GOBP_URETERIC_BUD_FORMATION GOBP_URINARY_BLADDER_SMOOTH_MUSCLE_CONTRACTION GOBP_URINARY_TRACT_SMOOTH_MUSCLE_CONTRACTION GOBP_UROGENITAL_SYSTEM_DEVELOPMENT GOBP_URONIC_ACID_METABOLIC_PROCESS GOBP_UTERINE_SMOOTH_MUSCLE_CONTRACTION GOBP_UTERUS_DEVELOPMENT GOBP_UTERUS_MORPHOGENESIS GOBP_UTP_BIOSYNTHETIC_PROCESS GOBP_UTP_METABOLIC_PROCESS GOBP_UV_DAMAGE_EXCISION_REPAIR GOBP_UV_PROTECTION GOBP_V_D_J_RECOMBINATION | GOBP_VACUOLAR_ACIDIFICATION GOBP_VACUOLAR_LOCALIZATION GOBP_VACUOLAR_PROTON_TRANSPORTING_V_TYPE_ATPASE_COMPLEX_ASSEMBLY GOBP_VACUOLAR_TRANSMEMBRANE_TRANSPORT | GOBP_VACUOLAR_TRANSPORT | GOBP_VACUOLE_FUSION GOBP_VACUOLE_ORGANIZATION GOBP_VAGINA_DEVELOPMENT GOBP_VALINE_METABOLIC_PROCESS GOBP_VASCULAR_ASSOCIATED_SMOOTH_MUSCLE_CELL_APOPTOTIC_PROCESS GOBP_VASCULAR_ASSOCIATED_SMOOTH_MUSCLE_CELL_DEVELOPMENT GOBP_VASCULAR_ASSOCIATED_SMOOTH_MUSCLE_CELL_DIFFERENTIATION GOBP_VASCULAR_ASSOCIATED_SMOOTH_MUSCLE_CELL_MIGRATION GOBP_VASCULAR_ASSOCIATED_SMOOTH_MUSCLE_CELL_PROLIFERATION GOBP_VASCULAR_ASSOCIATED_SMOOTH_MUSCLE_CONTRACTION GOBP_VASCULAR_ENDOTHELIAL_CELL_PROLIFERATION GOBP_VASCULAR_ENDOTHELIAL_GROWTH_FACTOR_PRODUCTION | GOBP_VASCULAR_ENDOTHELIAL_GROWTH_FACTOR_RECEPTOR_2_SIGNALING_PATHWAY GOBP_VASCULAR_ENDOTHELIAL_GROWTH_FACTOR_RECEPTOR_SIGNALING_PATHWAY GOBP_VASCULAR_ENDOTHELIAL_GROWTH_FACTOR_SIGNALING_PATHWAY GOBP_VASCULAR_PROCESS_IN_CIRCULATORY_SYSTEM

23397
22925
22925
26140
23823
23823
23287
23287
23287
23288
26024
23527
25504
25690
23786
26143
25025
25025
25025
25025
25025

GOBP_VASCULAR_TRANSPORT

| GOBP_VASCULAR_WOUND_HEALING | GOBP_VASCULATURE_DEVELOPMENT