**Function Enrichment for Top drivers in G3 Subgroup**

| Pathway | Items |
|---|---|
| REACTOME_NEURONAL_SYSTEM | Total 10 items, e.g: GABRA5;GNB5;GNGT1;GABRR1;MAOA |
| REACTOME_TRANSMISSION_ACROSS_CHEMICAL_SYNAPSES | Total 8 items, e.g: GABRA5;GNB5;GNGT1;GABRR1;MAOA |
| REACTOME_GABA_RECEPTOR_ACTIVATION | GABRA5;GNGT1;GABRR1;GABRG2;KCNJ2 |
| REACTOME_NEUROTRANSMITTER_RECEPTOR_BINDING_AND_DOWNSTREAM_TRANSMISSION_IN_THE_POSTSYNAPTIC_CELL | Total 6 items, e.g: GABRA5;GNB5;GNGT1;GABRR1;GABRG2 |
| REACTOME_TRANSMEMBRANE_TRANSPORT_OF_SMALL_MOLECULES | Total 9 items, e.g: GABRA5;SLC26A7;GNB5;GNGT1;GABRR1 |
| REACTOME_G_ALPHA_Q_SIGNALLING_EVENTS | Total 6 items, e.g: CCKAR;GNB5;TACR3;GNGT1;TRPC7 |
| REACTOME_GASTRIN_CREB_SIGNALLING_PATHWAY_VIA_PKC_AND_MAPK | Total 6 items, e.g: CCKAR;GNB5;TACR3;GNGT1;TRPC7 |
| KEGG_NEUROACTIVE_LIGAND_RECEPTOR_INTERACTION | Total 7 items, e.g: GABRA5;CCKAR;TACR3;GABRR1;GABRG2 |
| KEGG_TRYPTOPHAN_METABOLISM | MAOA;AANAT;TPH1 |
| REACTOME_POTASSIUM_CHANNELS | GNGT1;KCNH6;KCNJ2;KCNN1 |
| REACTOME_ION_CHANNEL_TRANSPORT | GABRA5;GABRR1;GABRG2 |
| REACTOME_GPCR_LIGAND_BINDING | Total 7 items, e.g: CCKAR;GNB5;TACR3;GNGT1;FZD1 |
| REACTOME_PLATELET_HOMEOSTASIS | GNB5;GNGT1;TRPC7 |
| REACTOME_CLASS_B_2_SECRETIN_FAMILY_RECEPTORS | GNB5;GNGT1;FZD1 |
| REACTOME_OPIOID_SIGNALLING | GNB5;GNGT1;GNAT1 |
| REACTOME_THROMBIN_SIGNALLING_THROUGH_PROTEINASE_ACTIVATED_RECEPTORS_PARS | GNB5;GNGT1 |
| REACTOME_METABOLISM_OF_AMINO_ACIDS_AND_DERIVATIVES | INHBB;AANAT;TPH1;ASS1 |
| REACTOME_GABA_B_RECEPTOR_ACTIVATION | GNGT1;KCNJ2 |
| REACTOME_G_ALPHA_Z_SIGNALLING_EVENTS | GNB5;GNGT1 |
| REACTOME_REGULATION_OF_INSULIN_SECRETION_BY_GLUCAGON_LIKE_PEPTIDE1 | GNB5;GNGT1 |
| REACTOME_REGULATION_OF_WATER_BALANCE_BY_RENAL_AQUAPORINS | GNB5;GNGT1 |
| KEGG_ABC_TRANSPORTERS | ABCD1;ABCA4 |
| REACTOME_G_ALPHA_S_SIGNALLING_EVENTS | GNB5;GNGT1;PTGER2 |
| REACTOME_G_ALPHA1213_SIGNALLING_EVENTS | GNB5;GNGT1 |
| REACTOME_AQUAPORIN_MEDIATED_TRANSPORT | GNB5;GNGT1 |
| KEGG_ARGININE_AND_PROLINE_METABOLISM | MAOA;ASS1 |
| KEGG_PEROXISOME | MVK;ABCD1 |
| REACTOME_PEPTIDE_LIGAND_BINDING_RECEPTORS | CCKAR;TACR3;PROKR2 |
| KEGG_CHEMOKINE_SIGNALING_PATHWAY | GRK1;GNB5;GNGT1 |
| REACTOME_CLASS_A1_RHODOPSIN_LIKE_RECEPTORS | CCKAR;TACR3;PTGER2;PROKR2 |

P-value axis: 1  0.1  0.01  0.001  1e-04  1e-05  1e-06

**P-value**