**S3 Table. The biological processes associated with the genes of biological net obtained for TBXA2R.**

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| --- | --- | --- |
| **Cluster** | **Term within cluster** | **Genes associated with each term** |
| Wound response | System process | *ADRB1, ADRB2, AGTR1, AGTRAP, ARRB2, BDKRB2, CAV3, CDH15, EDNRA, GNAI2, GNAS, GNB1, HRH2, HTR2B, ITGB1BP1, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, TBXA2R, WDR36* |
| Regulation of anatomical structure size | *ADRB1, ADRB2, AGTR1, BDKRB2, CAV3, EDNRA, HRH2, HTR2B, ITGB1BP1, KCNMA1, TBXA2R, WDR36* |
| Regulation of system process | *ADRB1, ADRB2, AGTR1, BDKRB2, CAV3, HRH2, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, TBXA2R* |
| Response to hypoxia | *ADRB2, AGTRAP, BDKRB2, EDNRA, GNB1, KCNMA1, OPRD1, RAF1* |
| Vascular process in circulatory system | *ADRB1, ADRB2, AGTR1, BDKRB2, EDNRA, HRH2, HTR2B, ITGB1BP1, KCNMA1, TBXA2R* |
| Muscle contraction | *ADRB2, BDKRB2, CAV3, EDNRA, HTR2B, KCNMA1, PRKCA, TBXA2R* |
| Blood circulation | *ADRB1, ADRB2, AGTR1, AGTRAP, BDKRB2, CAV3, EDNRA, HRH2, HTR2B, ITGB1BP1, KCNMA1, PRKCA, TBXA2R* |
| Regulation of blood pressure | *ADRB1, ADRB2, AGTR1, AGTRAP, BDKRB2, EDNRA, TBXA2R* |
| Regulation of tube size | *ADRB1, ADRB2, AGTR1, BDKRB2, EDNRA, HRH2, HTR2B, ITGB1BP1, KCNMA1, TBXA2R* |
| Regulation of muscle system process | *ADRB2, CAV3, KCNMA1, PRKCA, TBXA2R* |
| Regulation of blood circulation | *ADRB1, ADRB2, AGTR1, BDKRB2, CAV3, HRH2, PRKCA, TBXA2R* |
| Positive regulation of hydrolase activity | *ADRB1, ADRB2, AGTR1, EDNRA, GNA13, GNAQ, GNAS, HTR2B, PRKCA, RACK1, TBXA2R* |
| Synaptic signaling | Response to radiation | *GNA11, GNAQ, GNB1, HRH2, OPRK1, OPRM1, PRKCA* |
| Detection of abiotic stimulus | *ARRB2, CAV3, GNA11, GNAQ, GNB1, PRKCA* |
| Cellular response to abiotic stimulus | *BDKRB2, EDNRA, GNA11, GNB1, PRKCA* |
| Response to light stimulus | *GNA11, GNAQ, GNB1, HRH2, PRKCA* |
| Synaptic signaling | *ADRB2, ARRB2, GNAI2, GNB1, HRH2, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, RAF1* |
| Response to abiotic  stimulus | Behavior | *ADRB2, ARRB2, EDNRA, GNAI2, GNAQ, HRH2, HTR2B, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA* |
| System process | *ADRB1, ADRB2, AGTR1, AGTRAP, ARRB2, BDKRB2, CAV3, CDH15, EDNRA, GNAI2, GNAS, GNB1, HRH2, HTR2B, ITGB1BP1, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, TBXA2R, WDR36* |
| Locomotory behavior | *ARRB2, GNAI2, KCNMA1, OPRD1, OPRK1, OPRM1* |
| Response to abiotic stimulus | *ADRB1, ADRB2, AGTRAP, ARRB2, BDKRB2, CAV3, EDNRA, GNA11, GNAI2, GNAQ, GNB1, HRH2, HTR2B, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, RAF1* |
| Single-organism behavior | *ADRB2, ARRB2, GNAI2, HRH2, KCNMA1, OPRD1, OPRK1, OPRM1* |
| Response to radiation | *GNA11, GNAQ, GNB1, HRH2, OPRK1, OPRM1, PRKCA* |
| Regulation of hormone levels | *AGTR1, GNAI2, GNAS, KCNMA1, OPRK1, PRKCA, RAF1* |
| Adult behavior | *ARRB2, GNAI2, KCNMA1, OPRD1, OPRK1, OPRM1* |
| Cell-cell signaling | *ADRB1, ADRB2, AGTR1, ARRB2, GNAI2, GNAS, GNB1, HRH2, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, RAF1* |
| Regulation of system process | *ADRB1, ADRB2, AGTR1, BDKRB2, CAV3, HRH2, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, TBXA2R* |
| Regulation of transport | *ADRB2, AGTR1, ARRB2, CAV3, CDH15, EDNRA, G3BP2, GNAI2, GNAQ, GNAS, GRK6, HTR2B, ITGB1BP1, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, RACK1, YWHAZ* |
| Regulation of cyclase activity | *ADRB1, ADRB2, EDNRA, GNAI2, GNAS, OPRM1, PRKCA, RAF1* |
| Regulation of lyase activity | *ADRB1, ADRB2, EDNRA, GNAI2, GNAS, OPRM1, PRKCA, RAF1* |
| Synaptic signaling | *ADRB2, ARRB2, GNAI2, GNB1, HRH2, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, RAF1* |
| Regulation of ion transport | *ADRB2, ARRB2, CAV3, EDNRA, GNAI2, GRK6, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA* |
| Signal release | *AGTR1, GNAI2, GNAS, OPRK1, OPRM1, PRKCA, RAF1* |
| Regulation of ion transmembrane transport | *CAV3, EDNRA, GRK6, KCNMA1, OPRK1, OPRM1, PRKCA* |
| Positive regulation of intracellular signal transduction | *ADRB1, ADRB2, ARRB2, CDH2, EDNRA, GNAI2, GNAS, HTR2B, ITGB1BP1, OPRK1, OPRM1, PRKCA, RACK1, RAF1* |
| MAPK cascade | *ADRB2, ARRB2, CAV3, CDH2, EDNRA, GNAI2, HTR2B, ITGB1BP1, OPRK1, OPRM1, PRKCA, RAF1* |
| G-protein coupled receptor signaling pathway | G-protein coupled receptor signaling pathway | *ADRB1, ADRB2, AGTR1, AGTRAP, ARRB2, BDKRB2, EDNRA, GNA11, GNA12, GNA13, GNAI2, GNAQ, GNAS, GNB1, GPRASP1, GRK5, GRK6, HRH2, HTR2B, OPRD1, OPRK1, OPRM1, PRKCA, TBXA2R* |
| Regulation of cyclaseactivity | Behavior | *ADRB2, ARRB2, EDNRA, GNAI2, GNAQ, HRH2, HTR2B, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA* |
| Cell activation | *ADRB2, ARRB2, GNA11, GNA12, GNA13, GNAI2, GNAQ, GNAS, GNB1, HTR2B, PRKCA, RAF1, TBXA2R, YWHAZ* |
| Renal system process | *ADRB2, AGTR1, EDNRA, GNAS, KCNMA1, PRKCA* |
| Regulation of hormone levels | *AGTR1, GNAI2, GNAS, KCNMA1, OPRK1, PRKCA, RAF1* |
| Negative regulation of signaling | *ADRB2, ARRB2, BDKRB2, CAV3, CDH2, G3BP2, GNAI2, GPRASP1, GRK5, GRK6, HTR2B, ITGB1BP1, OPRK1, OPRM1, PRKCA, RACK1, RAF1* |
| Regulation of homeostatic process | *AGTR1, CAV3, EDNRA, HTR2B, OPRK1, PRKCA, RACK1* |
| Cell-cell signaling | *ADRB1, ADRB2, AGTR1, ARRB2, GNAI2, GNAS, GNB1, HRH2, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, RAF1* |
| Regulation of protein localization | *CAV3, CDH2, G3BP2, GNAI2, GNAQ, GNAS, HTR2B, ITGB1BP1, OPRM1, PRKCA, RACK1, YWHAZ* |
| Multicellular organismal homeostasis | *ADRB1, ADRB2, CDH15, GNAS, OPRK1, PRKCA, WDR36* |
| Regulation of transport | *ADRB2, AGTR1, ARRB2, CAV3, CDH15, EDNRA, G3BP2, GNAI2, GNAQ, GNAS, GRK6, HTR2B, ITGB1BP1, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, RACK1, YWHAZ* |
| Positive regulation of transport | *ADRB2, ARRB2, CAV3, CDH15, EDNRA, GNAI2, HTR2B, ITGB1BP1, OPRK1, RACK1, YWHAZ* |
| Negative regulation of transport | *CAV3, G3BP2, GRK6, ITGB1BP1, OPRK1, OPRM1, PRKCA, RACK1* |
| Regulation of cellular localization | *CAV3, CDH15, CDH2, EDNRA, G3BP2, GNAI2, GNAQ, GNAS, HTR2B, ITGB1BP1, OPRK1, OPRM1, PRKCA, RACK1, YWHAZ* |
| Muscle contraction | *ADRB2, BDKRB2, CAV3, EDNRA, HTR2B, KCNMA1, PRKCA, TBXA2R* |
| Regulation of blood pressure | *ADRB1, ADRB2, AGTR1, AGTRAP, BDKRB2, EDNRA, TBXA2R* |
| Negative regulation of cell communication | *ADRB2, ARRB2, BDKRB2, CAV3, CDH2, G3BP2, GNAI2, GPRASP1, GRK5, GRK6, HTR2B, ITGB1BP1, OPRK1, OPRM1, PRKCA, RACK1, RAF1* |
| Anatomical structure homeostasis | *ADRB2, CAV3, CDH15, GNAS, WDR36* |
| Positive regulation of signal transduction | *ADRB1, ADRB2, ARRB2, CDH15, CDH2, EDNRA, GNAI2, GNAS, HTR2B, ITGB1BP1, OPRK1, OPRM1, PRKCA, RACK1, RAF1, YWHAZ* |
| Negative regulation of signal transduction | *ADRB2, ARRB2, BDKRB2, CAV3, CDH2, G3BP2, GPRASP1, GRK5, GRK6, HTR2B, ITGB1BP1, OPRM1, PRKCA, RACK1, RAF1* |
| Regulation of cyclase activity | *ADRB1, ADRB2, EDNRA, GNAI2, GNAS, OPRM1, PRKCA, RAF1* |
| Regulation of intracellular transport | *EDNRA, G3BP2, GNAQ, ITGB1BP1, PRKCA, RACK1, YWHAZ* |
| Regulation of hydrolase  Activity | *ADRB1, ADRB2, AGTR1, ARRB2, EDNRA, GNA13, GNAQ, GNAS, HTR2B, ITGB1BP1, PRKCA, RACK1, RAF1, TBXA2R* |
| Regulation of lyase  Activity | *ADRB1, ADRB2, EDNRA, GNAI2, GNAS, OPRM1, PRKCA, RAF1* |
| Regulation of establishment of protein localization | *G3BP2, GNAI2, GNAQ, GNAS, HTR2B, ITGB1BP1, OPRM1, PRKCA, RACK1, YWHAZ* |
| Regulation of muscle system process | *ADRB2, CAV3, KCNMA1, PRKCA, TBXA2R* |
| Synaptic signaling | *ADRB2, ARRB2, GNAI2, GNB1, HRH2, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, RAF1* |
| Regulation of cellular protein localization | *CAV3, CDH2, G3BP2, GNAQ, ITGB1BP1, RACK1, YWHAZ* |
| Nucleoside phosphate metabolic process | *ADRB1, ADRB2, EDNRA, GNAI2, GNAS, HTR2B, NME1-NME2, OPRM1, PRKCA, RACK1, RAF1* |
| Regulation of G-protein coupled receptor protein signaling pathway | *ADRB2, ARRB2, GNB1, GPRASP1, GRK5, GRK6, HTR2B, PRKCA* |
| Positive regulation of cyclase activity | *ADRB1, ADRB2, EDNRA, GNAS, PRKCA, RAF1* |
| Regulation of ion transport | *ADRB2, ARRB2, CAV3, EDNRA, GNAI2, GRK6, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA* |
| Positive regulation of hydrolase activity | *ADRB1, ADRB2, AGTR1, EDNRA, GNA13, GNAQ, GNAS, HTR2B, PRKCA, RACK1, TBXA2R* |
| Positive regulation of lyase activity | *ADRB1, ADRB2, EDNRA, GNAS, PRKCA, RAF1* |
| Cardiovascular system development | *ADRB2, CAV3, CDH2, EDNRA, GNA11, GNA13, GNAQ, HTR2B, ITGB1BP1, PRKCA, RAF1, TBXA2R* |
| Regulation of intracellular signal transduction | *ADRB1, ADRB2, ARRB2, BDKRB2, CAV3, CDH2, EDNRA, G3BP2, GNA12, GNAI2, GNAS, HTR2B, ITGB1BP1, OPRK1, OPRM1, PRKCA, RACK1, RAF1* |
| Signal release | *AGTR1, GNAI2, GNAS, OPRK1, OPRM1, PRKCA, RAF1* |
| Regulation of ion transmembrane transport | *CAV3, EDNRA, GRK6, KCNMA1, OPRK1, OPRM1, PRKCA* |
| Negative regulation of G-protein coupled receptor protein signaling pathway | *ADRB2, ARRB2, GPRASP1, GRK5, GRK6, HTR2B* |
| Negative regulation of intracellular signal transduction | *BDKRB2, CAV3, G3BP2, ITGB1BP1, OPRM1, PRKCA, RACK1* |
| Positive regulation of intracellular signal transduction | *ADRB1, ADRB2, ARRB2, CDH2, EDNRA, GNAI2, GNAS, HTR2B, ITGB1BP1, OPRK1, OPRM1, PRKCA, RACK1, RAF1* |
| Blood vessel morphogenesis | *ADRB2, CDH2, EDNRA, GNA13, ITGB1BP1, PRKCA, TBXA2R* |
| MAPK cascade | *ADRB2, ARRB2, CAV3, CDH2, EDNRA, GNAI2, HTR2B, ITGB1BP1, OPRK1, OPRM1, PRKCA, RAF1* |
| Wound healing | Cell activation | *ADRB2, ARRB2, GNA11, GNA12, GNA13, GNAI2, GNAQ, GNAS, GNB1, HTR2B, PRKCA, RAF1, TBXA2R, YWHAZ* |
| Response to wounding | *ADRB2, AGTR1, ARRB2, CAV3, CDH15, EDNRA, GNA11, GNA12, GNA13, GNAI2, GNAQ, GNAS, GNB1, KCNMA1, OPRM1, PRKCA, RAF1, TBXA2R, YWHAZ* |
| Regulation of body fluid levels | *ADRB2, ARRB2, GNA11, GNA12, GNA13, GNAI2, GNAQ, GNAS, GNB1, KCNMA1, OPRK1, PRKCA, RAF1, TBXA2R, YWHAZ* |
| Wound healing | *ADRB2, ARRB2, CAV3, CDH15, GNA11, GNA12, GNA13, GNAI2, GNAQ, GNAS, GNB1, KCNMA1, OPRM1, PRKCA, RAF1, TBXA2R, YWHAZ* |
| Chemical homeostasis | *AGTR1, BDKRB2, CAV3, EDNRA, GNA13, GNAI2, GNAS, GNB1, HTR2B, KCNMA1, OPRM1, PRKCA, RACK1, RAF1, TBXA2R* |
| Blood coagulation | *ADRB2, ARRB2, GNA11, GNA12, GNA13, GNAI2, GNAQ, GNAS, GNB1, KCNMA1, PRKCA, RAF1, TBXA2R, YWHAZ* |
| Regulation of hydrolase activity | *ADRB1, ADRB2, AGTR1, ARRB2, EDNRA, GNA13, GNAQ, GNAS, HTR2B, ITGB1BP1, PRKCA, RACK1, RAF1, TBXA2R* |
| Homeostatic Process | System process | *ADRB1, ADRB2, AGTR1, AGTRAP, ARRB2, BDKRB2, CAV3, CDH15, EDNRA, GNAI2, GNAS, GNB1, HRH2, HTR2B, ITGB1BP1, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, TBXA2R, WDR36* |
| Response to abiotic stimulus | *ADRB1, ADRB2, AGTRAP, ARRB2, BDKRB2, CAV3, EDNRA, GNA11, GNAI2, GNAQ, GNB1, HRH2, HTR2B, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, RAF1* |
| Homeostatic process | *ADRB1, ADRB2, AGTR1, BDKRB2, CAV3, CDH15, CDH2, EDNRA, GNA13, GNAI2, GNAS, GNB1, HTR2B, KCNMA1, OPRK1, OPRM1, PRKCA, RACK1, RAF1, TBXA2R, WDR36* |
| Regulation of anatomical structure size | *ADRB1, ADRB2, AGTR1, BDKRB2, CAV3, EDNRA, HRH2, HTR2B, ITGB1BP1, KCNMA1, TBXA2R, WDR36* |
| Cell-cell signaling | *ADRB1, ADRB2, AGTR1, ARRB2, GNAI2, GNAS, GNB1, HRH2, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, RAF1* |
| Regulation of system process | *ADRB1, ADRB2, AGTR1, BDKRB2, CAV3, HRH2, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, TBXA2R* |
| Blood circulation | *ADRB1, ADRB2, AGTR1, AGTRAP, BDKRB2, CAV3, EDNRA, HRH2, HTR2B, ITGB1BP1, KCNMA1, PRKCA, TBXA2R* |
| Cellular chemical homeostasis | Regulation of homeostatic process | *AGTR1, CAV3, EDNRA, HTR2B, OPRK1, PRKCA, RACK1* |
| Positive regulation of transport | *ADRB2, ARRB2, CAV3, CDH15, EDNRA, GNAI2, HTR2B, ITGB1BP1, OPRK1, RACK1, YWHAZ* |
| Negative regulation of transport | *CAV3, G3BP2, GRK6, ITGB1BP1, OPRK1, OPRM1, PRKCA, RACK1* |
| Muscle contraction | *ADRB2, BDKRB2, CAV3, EDNRA, HTR2B, KCNMA1, PRKCA, TBXA2R* |
| Cellular chemical homeostasis | *AGTR1, BDKRB2, CAV3, EDNRA, GNA13, GNB1, HTR2B, KCNMA1, OPRM1, PRKCA, RACK1, RAF1, TBXA2R* |
| Regulation of ion transport | *ADRB2, ARRB2, CAV3, EDNRA, GNAI2, GRK6, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA* |
| Positive regulation of hydrolase activity | *ADRB1, ADRB2, AGTR1, EDNRA, GNA13, GNAQ, GNAS, HTR2B, PRKCA, RACK1, TBXA2R* |
| Response to lipopolysaccharide | *EDNRA, OPRK1, OPRM1, PRKCA, TBXA2R* |
| Regulation of ion transmembrane transport | *CAV3, EDNRA, GRK6, KCNMA1, OPRK1, OPRM1, PRKCA* |
| Response to wounding | System process | *ADRB1, ADRB2, AGTR1, AGTRAP, ARRB2, BDKRB2, CAV3, CDH15, EDNRA, GNAI2, GNAS, GNB1, HRH2, HTR2B, ITGB1BP1, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, TBXA2R, WDR36* |
| Response to wounding | *ADRB2, AGTR1, ARRB2, CAV3, CDH15, EDNRA, GNA11, GNA12, GNA13, GNAI2, GNAQ, GNAS, GNB1, KCNMA1, OPRM1, PRKCA, RAF1, TBXA2R, YWHAZ* |
| Regulation of homeostatic process | *AGTR1, CAV3, EDNRA, HTR2B, OPRK1, PRKCA, RACK1* |
| Homeostatic process | *ADRB1, ADRB2, AGTR1, BDKRB2, CAV3, CDH15, CDH2, EDNRA, GNA13, GNAI2, GNAS, GNB1, HTR2B, KCNMA1, OPRK1, OPRM1, PRKCA, RACK1, RAF1, TBXA2R, WDR36* |
| Muscle contraction | *ADRB2, BDKRB2, CAV3, EDNRA, HTR2B, KCNMA1, PRKCA, TBXA2R* |
| Chemical homeostasis | *AGTR1, BDKRB2, CAV3, EDNRA, GNA13, GNAI2, GNAS, GNB1, HTR2B, KCNMA1, OPRM1, PRKCA, RACK1, RAF1, TBXA2R* |
| Cellular chemical homeostasis | *AGTR1, BDKRB2, CAV3, EDNRA, GNA13, GNB1, HTR2B, KCNMA1, OPRM1, PRKCA, RACK1, RAF1, TBXA2R* |
| Vascular process in circulatory system | System process | *ADRB1, ADRB2, AGTR1, AGTRAP, ARRB2, BDKRB2, CAV3, CDH15, EDNRA, GNAI2, GNAS, GNB1, HRH2, HTR2B, ITGB1BP1, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, TBXA2R, WDR36* |
| Single-organism behavior | *ADRB2, ARRB2, GNAI2, HRH2, KCNMA1, OPRD1, OPRK1, OPRM1* |
| Renal system process | *ADRB2, AGTR1, EDNRA, GNAS, KCNMA1, PRKCA* |
| Regulation of homeostatic process | *AGTR1, CAV3, EDNRA, HTR2B, OPRK1, PRKCA, RACK1* |
| Regulation of anatomical structure size | *ADRB1, ADRB2, AGTR1, BDKRB2, CAV3, EDNRA, HRH2, HTR2B, ITGB1BP1, KCNMA1, TBXA2R, WDR36* |
| Cell-cell signaling | *ADRB1, ADRB2, AGTR1, ARRB2, GNAI2, GNAS, GNB1, HRH2, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, RAF1* |
| Regulation of system process | *ADRB1, ADRB2, AGTR1, BDKRB2, CAV3, HRH2, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, TBXA2R* |
| Vascular process in circulatory system | *ADRB1, ADRB2, AGTR1, BDKRB2, EDNRA, HRH2, HTR2B, ITGB1BP1, KCNMA1, TBXA2R* |
| Muscle contraction | *ADRB2, BDKRB2, CAV3, EDNRA, HTR2B, KCNMA1, PRKCA, TBXA2R* |
| Blood circulation | *ADRB1, ADRB2, AGTR1, AGTRAP, BDKRB2, CAV3, EDNRA, HRH2, HTR2B, ITGB1BP1, KCNMA1, PRKCA, TBXA2R* |
| Regulation of blood pressure | *ADRB1, ADRB2, AGTR1, AGTRAP, BDKRB2, EDNRA, TBXA2R* |
| Regulation of tube size | *ADRB1, ADRB2, AGTR1, BDKRB2, EDNRA, HRH2, HTR2B, ITGB1BP1, KCNMA1, TBXA2R* |
| Chemical homeostasis | *AGTR1, BDKRB2, CAV3, EDNRA, GNA13, GNAI2, GNAS, GNB1, HTR2B, KCNMA1, OPRM1, PRKCA, RACK1, RAF1, TBXA2R* |
| Cellular chemical homeostasis | *AGTR1, BDKRB2, CAV3, EDNRA, GNA13, GNB1, HTR2B, KCNMA1, OPRM1, PRKCA, RACK1, RAF1, TBXA2R* |
| Regulation of muscle system process | *ADRB2, CAV3, KCNMA1, PRKCA, TBXA2R* |
| Synaptic signaling | *ADRB2, ARRB2, GNAI2, GNB1, HRH2, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA, RAF1* |
| Regulation of blood circulation | *ADRB1, ADRB2, AGTR1, BDKRB2, CAV3, HRH2, PRKCA, TBXA2R* |
| Regulation of ion transport | *ADRB2, ARRB2, CAV3, EDNRA, GNAI2, GRK6, KCNMA1, OPRD1, OPRK1, OPRM1, PRKCA* |
| Cardiovascular system development | *ADRB2, CAV3, CDH2, EDNRA, GNA11, GNA13, GNAQ, HTR2B, ITGB1BP1, PRKCA, RAF1, TBXA2R* |
| Regulation of ion transmembrane transport | *CAV3, EDNRA, GRK6, KCNMA1, OPRK1, OPRM1, PRKCA* |
| Blood vessel morphogenesis | *ADRB2, CDH2, EDNRA, GNA13, ITGB1BP1, PRKCA, TBXA2R* |
| Regulation of G-protein coupled receptor protein signaling pathway | Negative regulation of signal transduction | *ADRB2, ARRB2, BDKRB2, CAV3, CDH2, G3BP2, GPRASP1, GRK5, GRK6, HTR2B, ITGB1BP1, OPRM1, PRKCA, RACK1, RAF1* |
| Regulation of G-protein coupled receptor protein signaling pathway | *ADRB2, ARRB2, GNB1, GPRASP1, GRK5, GRK6, HTR2B, PRKCA* |
| Regulation of hydrolase activity | Negative adaptation of signaling pathway | *ADRB2, ARRB2, GRK5, GRK6, HTR2B* |
| Negative regulation of G-protein coupled receptor protein signaling pathway | *ADRB2, ARRB2, GPRASP1, GRK5, GRK6, HTR2B* |
| Muscle contraction | *ADRB2, BDKRB2, CAV3, EDNRA, HTR2B, KCNMA1, PRKCA, TBXA2R* |
| Regulation of hydrolase activity | *ADRB1, ADRB2, AGTR1, ARRB2, EDNRA, GNA13, GNAQ, GNAS, HTR2B, ITGB1BP1, PRKCA, RACK1, RAF1, TBXA2R* |
| Heart development | *CAV3, EDNRA, GNA11, GNAQ, HTR2B, RAF1* |
| Positive regulation of hydrolase activity | *ADRB1, ADRB2, AGTR1, EDNRA, GNA13, GNAQ, GNAS, HTR2B, PRKCA, RACK1, TBXA2R* |
| Cardiovascular system development | *ADRB2, CAV3, CDH2, EDNRA, GNA11, GNA13, GNAQ, HTR2B, ITGB1BP1, PRKCA, RAF1, TBXA2R* |
| Blood vessel morphogenesis | *ADRB2, CDH2, EDNRA, GNA13, ITGB1BP1, PRKCA, TBXA2R* |
| MAPK cascade | *ADRB2, ARRB2, CAV3, CDH2, EDNRA, GNAI2, HTR2B, ITGB1BP1, OPRK1, OPRM1, PRKCA, RAF1* |

Abbreviation-TBXA2R: thromboxane A2 receptor.