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HTR2B / 5-HT2B Receptor Antibody (Cytoplasmic Domain)

Rabbit Polyclonal Antibody
Catalog # ALS10271

Specification

HTR2B / 5-HT2B Receptor Antibody (Cytoplasmic Domain) - Product Information

Application	**IHC**
Primary Accession	P41595
Reactivity	**Human, Monkey**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**54kDa KDa**

HTR2B / 5-HT2B Receptor Antibody (Cytoplasmic Domain) - Additional Information

Gene ID 3357

Other Names
5-hydroxytryptamine receptor 2B, 5-HT-2B, 5-HT2B, Serotonin receptor 2B, HTR2B

Target/Specificity
Human 5HT2B Receptor. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage
Long term: -70°C; Short term: +4°C

Precautions
HTR2B / 5-HT2B Receptor Antibody (Cytoplasmic Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

HTR2B / 5-HT2B Receptor Antibody (Cytoplasmic Domain) - Protein Information

Name HTR2B (HGNC:5294)

Function
G-protein coupled receptor for 5-hydroxytryptamine (serotonin) (PubMed:18703043, PubMed:23519210, PubMed:7926008, PubMed:8078486, PubMed:8143856, PubMed:8882600). Also functions as a receptor for various ergot alkaloid derivatives and psychoactive substances (PubMed:12970106, PubMed:18703043, PubMed:23519210, PubMed:23519215, PubMed:<a

href="http://www.uniprot.org/citations/24357322" target="_blank">24357322, PubMed:28129538, PubMed:30127358, PubMed:36087581, PubMed:7926008, PubMed:8078486, PubMed:8143856). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors (PubMed:23519215, PubMed:28129538, PubMed:8078486, PubMed:8143856, PubMed:8882600). HTR2B is coupled to G(q)/G(11) G alpha proteins and activates phospholipase C-beta, releasing diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) second messengers that modulate the activity of phosphatidylinositol 3- kinase and promote the release of Ca(2+) ions from intracellular stores, respectively (PubMed:18703043, PubMed:23519215, PubMed:28129538, PubMed:30127358, PubMed:36087581, PubMed:8078486, PubMed:8143856, PubMed:8882600). Beta-arrestin family members inhibit signaling via G proteins and mediate activation of alternative signaling pathways (PubMed:23519215, PubMed:28129538, PubMed:30127358, PubMed:36087581). Plays a role in the regulation of dopamine and 5- hydroxytryptamine release, 5-hydroxytryptamine uptake and in the regulation of extracellular dopamine and 5-hydroxytryptamine levels, and thereby affects neural activity. May play a role in the perception of pain (By similarity). Plays a role in the regulation of behavior, including impulsive behavior (PubMed:21179162). Required for normal proliferation of embryonic cardiac myocytes and normal heart development (By similarity). Protects cardiomyocytes against apoptosis (By similarity). Plays a role in the adaptation of pulmonary arteries to chronic hypoxia (By similarity). Plays a role in vasoconstriction (By similarity). Required for normal osteoblast function and proliferation, and for maintaining normal bone density (By similarity). Required for normal proliferation of the interstitial cells of Cajal in the intestine (By similarity).

Cellular Location
Cell membrane; Multi-pass membrane protein. Synapse, synaptosome {ECO:0000250|UniProtKB:Q02152}

Tissue Location
Ubiquitous. Detected in liver, kidney, heart, pulmonary artery, and intestine. Detected at lower levels in blood, placenta and brain, especially in cerebellum, occipital cortex and frontal cortex.

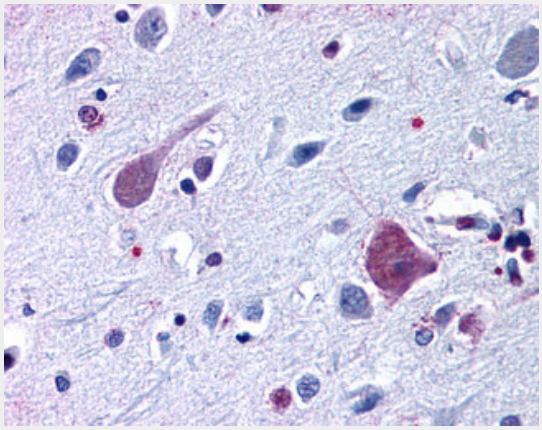
Volume
50 µl

HTR2B / 5-HT2B Receptor Antibody (Cytoplasmic Domain) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HTR2B / 5-HT2B Receptor Antibody (Cytoplasmic Domain) - Images



Anti-5HT2B Receptor antibody ALS10271 IHC of human brain, cortex.

HTR2B / 5-HT2B Receptor Antibody (Cytoplasmic Domain) - Background

G-protein coupled receptor for 5-hydroxytryptamine (serotonin). Also functions as a receptor for various ergot alkaloid derivatives and psychoactive substances. Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of down-stream effectors. Beta-arrestin family members inhibit signaling via G proteins and mediate activation of alternative signaling pathways. Signaling activates a phosphatidylinositol-calcium second messenger system that modulates the activity of phosphatidylinositol 3-kinase and down- stream signaling cascades and promotes the release of Ca(2+) ions from intracellular stores. Plays a role in the regulation of dopamine and 5-hydroxytryptamine release, 5-hydroxytryptamine uptake and in the regulation of extracellular dopamine and 5- hydroxytryptamine levels, and thereby affects neural activity. May play a role in the perception of pain. Plays a role in the regulation of behavior, including impulsive behavior. Required for normal proliferation of embryonic cardiac myocytes and normal heart development. Protects cardiomyocytes against apoptosis. Plays a role in the adaptation of pulmonary arteries to chronic hypoxia. Plays a role in vasoconstriction. Required for normal osteoblast function and proliferation, and for maintaining normal bone density. Required for normal proliferation of the interstitial cells of Cajal in the intestine.

HTR2B / 5-HT2B Receptor Antibody (Cytoplasmic Domain) - References

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Kim S.J.,et al.Mol. Cell. Probes 14:47-52(2000).
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