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Htr2a Blocking Peptide (N-term)

Synthetic peptide
Catalog # BP21295a

Specification

Htr2a Blocking Peptide (N-term) - Product Information

Primary Accession P35363

Htr2a Blocking Peptide (N-term) - Additional Information

Gene ID 15558

Other Names
5-hydroxytryptamine receptor 2A, 5-HT-2, 5-HT-2A, Serotonin receptor 2A, Htr2a, Htr2

Target/Specificity
The synthetic peptide sequence is selected from aa 16-30 of HUMAN Htr2a

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Htr2a Blocking Peptide (N-term) - Protein Information

Name Htr2a

Synonyms Htr2

Function
G-protein coupled receptor for 5-hydroxytryptamine (serotonin) (PubMed:11960784, PubMed:16873667, PubMed:17270739, PubMed:18297054, PubMed:21645528, PubMed:23129762, PubMed:23346101). Also functions as a receptor for various drugs and psychoactive substances, including mescaline, psilocybin, 1-(2,5-dimethoxy-4- iodophenyl)-2-aminopropane (DOI) and lysergic acid diethylamide (LSD) (By similarity). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors (By similarity). HTR2A 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 (By similarity). Beta-arrestin family members inhibit signaling via G proteins and mediate activation of alternative signaling pathways (PubMed:18297054). Affects neural activity, perception, cognition and mood (PubMed:18297054). Plays a role in the regulation of behavior, including responses to anxiogenic situations and psychoactive substances (PubMed:16873667, PubMed:17270739, PubMed:18297054, PubMed:23129762). Plays a role in intestinal smooth muscle contraction, and may play a role in arterial vasoconstriction (PubMed:11960784, PubMed:23346101).

Cellular Location
Cell membrane; Multi-pass membrane protein. Cell projection, dendrite. Cell projection, axon {ECO:0000250|UniProtKB:P14842}. Cytoplasmic vesicle. Membrane, caveola {ECO:0000250|UniProtKB:P14842}. Presynapse {ECO:0000250|UniProtKB:P14842}

Tissue Location
Detected in neurons in brain cortex. Detected in adult intestine, especially in mucosal epithelium, longitudinal and circular layers of muscularis externa and myenteric plexuses. Highly expressed in Paneth cells, and detected at lower levels in enterocytes (at protein level). Detected in neurons in the brain cortex

Htr2a Blocking Peptide (N-term) - Protocols

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

- Blocking Peptides

Htr2a Blocking Peptide (N-term) - Images

Htr2a Blocking Peptide (N-term) - Background

G-protein coupled receptor for 5-hydroxytryptamine (serotonin). Also functions as a receptor for various drugs and psychoactive substances, including mescaline, psilocybin, 1-(2,5-dimethoxy-4-iodophenyl)-2-aminopropane (DOI) and lysergic acid diethylamide (LSD). 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 phospholipase C and a phosphatidylinositol-calcium second messenger system that modulates the activity of phosphatidylinositol 3-kinase and promotes the release of Ca(2+) ions from intracellular stores. Affects neural activity, perception, cognition and mood. Plays a role in the regulation of behavior, including responses to anxiogenic situations and psychoactive substances. Plays a role in intestinal smooth muscle contraction, and may play a role in arterial vasoconstriction.

Htr2a Blocking Peptide (N-term) - References

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