

HTR2A Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP17879c

Specification

HTR2A Antibody (Center) Blocking Peptide - Product Information

Primary Accession

P28223

HTR2A Antibody (Center) Blocking Peptide - Additional Information

Gene ID 3356

Other Names

5-hydroxytryptamine receptor 2A, 5-HT-2, 5-HT-2A, Serotonin receptor 2A, HTR2A, HTR2

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 Antibody (Center) Blocking Peptide - Protein Information

Name HTR2A

Synonyms HTR2

Function

G-protein coupled receptor for 5-hydroxytryptamine (serotonin) (PubMed: 1330647, PubMed:18703043, PubMed:19057895). 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) (PubMed: 28129538). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of down-stream effectors (PubMed: 28129538). Beta-arrestin family members inhibit signaling via G proteins and mediate activation of alternative signaling pathways (PubMed:28129538). 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 (PubMed: <a href="http://www.uniprot.org/citations/18703043"



target="_blank">18703043, PubMed:28129538). 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. Plays a role in intestinal smooth muscle contraction, and may play a role in arterial vasoconstriction.

Cellular Location

Cell membrane; Multi-pass membrane protein. Cell projection, dendrite {ECO:0000250|UniProtKB:P35363}. Cell projection, axon {ECO:0000250|UniProtKB:P14842}. Cytoplasmic vesicle {ECO:0000250|UniProtKB:P14842}. Membrane, caveola {ECO:0000250|UniProtKB:P14842}. Presynapse {ECO:0000250|UniProtKB:P14842}

Tissue Location

Detected in brain cortex (at protein level). Detected in blood platelets.

HTR2A Antibody (Center) Blocking Peptide - Protocols

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

• Blocking Peptides

HTR2A Antibody (Center) Blocking Peptide - Images

HTR2A Antibody (Center) Blocking Peptide - Background

This gene encodes one of the receptors for serotonin, aneurotransmitter with many roles. Mutations in this gene areassociated with susceptibility to schizophrenia and obsessive-compulsive disorder, and are also associated withresponse to the antidepressant citalopram in patients with majordepressive disorder (MDD). MDD patients who also have a mutation inintron 2 of this gene show a significantly reduced response tocitalopram as this antidepressant downregulates expression of thisgene. Multiple transcript variants encoding different isoforms have been found for this gene.

HTR2A Antibody (Center) Blocking Peptide - References

Blaya, C., et al. Neurosci. Lett. 485(1):11-15(2010)Klein, A.B., et al. J. Cereb. Blood Flow Metab. 30 (11), E1-E7 (2010):Borroto-Escuela, D.O., et al. Biochem. Biophys. Res. Commun. 401(4):605-610(2010)Terrazzino, S., et al. Headache (2010) In press: Kapelski, P., et al. Psychiatr. Pol. 44(2):197-206(2010)