

HTR2C Blocking Peptide (Center) Synthetic peptide Catalog # BP21341c

Specification

HTR2C Blocking Peptide (Center) - Product Information

Primary Accession

<u>P28335</u>

HTR2C Blocking Peptide (Center) - Additional Information

Gene ID 3358

Other Names

5-hydroxytryptamine receptor 2C, 5-HT-2C, 5-HT2C, 5-HTR2C, 5-hydroxytryptamine receptor 1C, 5-HT-1C, 5-HT1C, Serotonin receptor 2C, HTR2C, HTR1C

Target/Specificity

The synthetic peptide sequence is selected from aa 274-288 of HUMAN HTR2C

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.

HTR2C Blocking Peptide (Center) - Protein Information

Name HTR2C (<u>HGNC:5295</u>)

Synonyms HTR1C

Function

G-protein coupled receptor for 5-hydroxytryptamine (serotonin) (PubMed:12970106, PubMed:18703043, PubMed:19057895, PubMed:29398112, PubMed:7895773). Also functions as a receptor for various drugs and psychoactive substances, including ergot alkaloid derivatives, 1-2,5,-dimethoxy-4-iodophenyl-2-aminopropane (DOI) and lysergic acid diethylamide (LSD) (PubMed:29398112, PubMed:29398112 . Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors



(PubMed:18703043, PubMed:29398112). HTR2C 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:<a href="http://www.uniprot.org/citations/29398112"

target="_blank">18703043, PubMed:29398112). Beta-arrestin family members inhibit signaling via G proteins and mediate activation of alternative signaling pathways (PubMed:29398112). Regulates neuronal activity via the activation of short transient receptor potential calcium channels in the brain, and thereby modulates the activation of pro-opiomelanocortin neurons and the release of CRH that then regulates the release of corticosterone (By similarity). Plays a role in the regulation of appetite and eating behavior, responses to anxiogenic stimuli and stress (By similarity). Plays a role in insulin sensitivity and glucose homeostasis (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein

Tissue Location Detected in brain..

HTR2C Blocking Peptide (Center) - Protocols

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

Blocking Peptides

HTR2C Blocking Peptide (Center) - Images

HTR2C Blocking Peptide (Center) - Background

G-protein coupled receptor for 5-hydroxytryptamine (serotonin). Also functions as a receptor for various drugs and psychoactive substances, including ergot alkaloid derivatives, 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 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. Regulates neuronal activity via the activation of short transient receptor potential calcium channels in the brain, and thereby modulates the activation of pro-opiomelacortin neurons and the release of CRH that then regulates the release of corticosterone. Plays a role in the regulation of appetite and eating behavior, responses to anxiogenic stimuli and stress. Plays a role in insulin sensitivity and glucose homeostasis.

HTR2C Blocking Peptide (Center) - References

Saltzman A.G., et al. Biochem. Biophys. Res. Commun. 181:1469-1478(1991). Stam N.J., et al. Eur. J. Pharmacol. 269:339-348(1994). Xie E., et al. Genomics 35:551-561(1996). Niswender C.M., et al. Ann. N. Y. Acad. Sci. 861:38-48(1998). Puhl H.L. III, et al. Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.