10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

HTR2C Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP13896c

Specification

HTR2C Antibody (Center) Blocking peptide - Product Information

Primary Accession P28335

HTR2C Antibody (Center) Blocking peptide - 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 used to generate the antibody AP13896c was selected from the Center region of HTR2C. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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 Antibody (Center) Blocking peptide - Protein Information

Name HTR2C (HGNC:5295)

Synonyms HTR1C

Function
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.

Cellular Location
Cell membrane; Multi-pass membrane protein

Tissue Location
Detected in brain..

HTR2C Antibody (Center) Blocking peptide - Protocols

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

- Blocking Peptides

HTR2C Antibody (Center) Blocking peptide - Images

HTR2C Antibody (Center) Blocking peptide - Background

Serotonin (5-hydroxytryptamine, 5-HT), a neurotransmitter,elicits a wide array of physiological effects by binding to severalreceptor subtypes, including the 5-HT2 family ofseven-transmembrane-spanning, G-protein-coupled receptors, whichactivate phospholipase C and D signaling pathways. This geneencodes the 2C subtype of serotonin receptor and its mRNA issubject to multiple RNA editing events, where genomically encodedadenosine residues are converted to inosines. RNA editing ispredicted to alter amino acids within the second intracellular loopof the 5-HT2C receptor and generate receptor isoforms that differin their ability to interact with G proteins and the activation ofphospholipase C and D signaling cascades, thus modulatingserotonergic neurotransmission in the central nervous system.Studies in humans have reported abnormalities in patterns of 5-HT2Cediting in depressed suicide victims.

HTR2C Antibody (Center) Blocking peptide - References

Gregoor, J.G., et al. Psychiatr. Genet. 20(6):311-316(2010)Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)Kiezebrink, K., et al. World J. Biol. Psychiatry 11(6):824-833(2010)Risselada, A.J., et al. Pharmacogenomics J. (2010) In press :McGrew, L., et al. Mol. Pharmacol. 65(1):252-256(2004)