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HTR2C Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13896C

Specification

HTR2C Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	P28335
Other Accession	NP_000859.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**51805**
Antigen Region	**253-282**

HTR2C Antibody (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
This HTR2C antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 253-282 amino acids from the Central region of human HTR2C.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
HTR2C Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

HTR2C Antibody (Center) - Protein Information

Name HTR2C (HGNC:5295)

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:19057895, 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: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

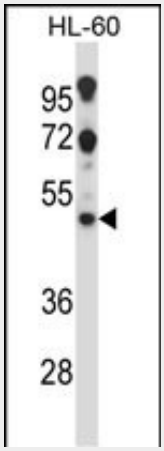
Tissue Location
Detected in brain..

HTR2C Antibody (Center) - 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

HTR2C Antibody (Center) - Images



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HTR2C Antibody (Center) (Cat. #AP13896c) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the HTR2C antibody detected the HTR2C protein (arrow).

HTR2C Antibody (Center) - Background

Serotonin (5-hydroxytryptamine, 5-HT), a neurotransmitter, elicits a wide array of physiological effects by binding to several receptor subtypes, including the 5-HT2 family of seven-transmembrane-spanning, G-protein-coupled receptors, which activate phospholipase C and D signaling pathways. This gene encodes the 2C subtype of serotonin receptor and its mRNA is subject to multiple RNA editing events, where genomically encoded adenosine residues are converted to inosines. RNA editing is predicted to alter amino acids within the second intracellular loop of the 5-HT2C receptor and generate receptor isoforms that differ in their ability to interact with G proteins and the activation of phospholipase C and D signaling cascades, thus modulating serotonergic neurotransmission in the central nervous system. Studies in humans have reported abnormalities in patterns of 5-HT2C editing in depressed suicide victims.

HTR2C Antibody (Center) - 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)