

# **HTR2C Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13896C

# **Specification**

# HTR2C Antibody (Center) - Product Information

**Application** WB,E **Primary Accession** P28335 NP 000859.1 Other Accession 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-HTR2C, 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

### **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). 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

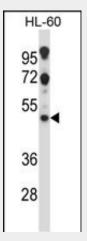
**Tissue Location**Detected in brain...

# HTR2C Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# HTR2C Antibody (Center) - Images



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)