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HTR2C Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21341c

Product Information

Application	WB, E
Primary Accession	P28335
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB52766
Calculated MW	51805

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 a rabbit immunized with a KLH conjugated synthetic peptide between 274-308 amino acids from the Central region of human HTR2C.
Dilution	WB~~1:4000 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.

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..

Background

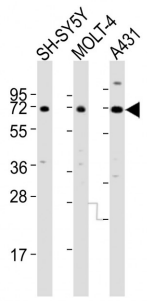
G-protein coupled receptor for 5-hydroxytryptamine (serotonin). Also functions as a receptor for various drugs and psychoactive substances, including ergot alkaloid derivatives, 1-2,5,-dimethoxy-4-iodophenyl-2-aminopropane (DOI) and lysergic acid diethylamide (LSD). Ligand binding causes a conformation 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.

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.

Images

All lanes : Anti-HTR2C Antibody (Center) at 1:4000 dilution
Lane 1: SH-SY5Y whole cell lysates Lane 2: MOLT-4 whole cell lysates Lane 3: A431 whole cell lysates
Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000



dilution Predicted band size : 52 kDa Blocking/Dilution buffer: 5% NFDM/TBST.