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Anti-5-HT2C Antibody

Catalog # AP60738

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P28335
Reactivity	Human, Mouse, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	51805

Additional Information

Gene ID	3358
Other Names	HTR1C; 5-hydroxytryptamine receptor 2C; 5-HT-2C; 5-HT2C; 5-HTR2C; 5-hydroxytryptamine receptor 1C; 5-HT-1C; 5-HT1C; Serotonin receptor 2C
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human 5-HT2C. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

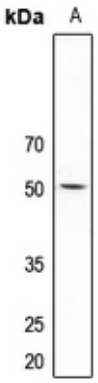
Name	HTR2C (HGNC:5295)
Synonyms	HTR1C
Function	G protein-coupled receptor for 5-hydroxytryptamine (serotonin) (PubMed:12970106, PubMed:18703043, PubMed:19057895, PubMed:29398112, PubMed:7895773). Also functions as a receptor for various drugs and psychoactive substances, including ergot alkaloid derivatives, 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).

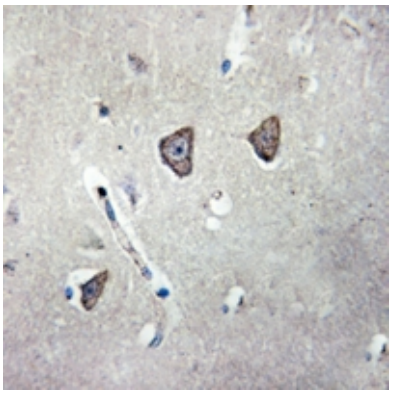
Cellular Location Cell membrane; Multi-pass membrane protein

Tissue Location Detected in brain..

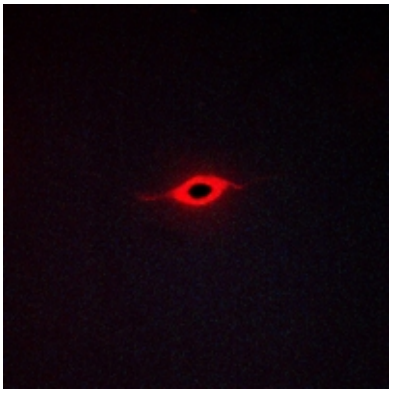
Images



Western blot analysis of 5-HT2C expression in mouse kidney (A) whole cell lysates. (Predicted band size: 51 kD; Observed band size: 48 kD)



Immunohistochemical analysis of 5-HT2C staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of 5-HT2C staining in A549 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.