





HTR2C Antibody

Product Code	CSB-RA616248A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P28335
Immunogen	A synthesized peptide derived from human 5HT2C Receptor
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	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 downstream 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.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Neuroscience; Metabolism; Signal transduction
Gene Names	HTR2C
Accession NO.	9H8
Image	

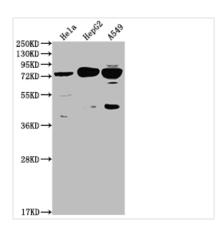
CUSABIO TECHNOLOGY LLC











Western Blot

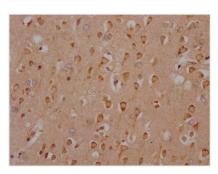
Positive WB detected in: Hela whole cell lysate, HepG2 whole cell lysate, A549 whole cell lysate

All lanes: HTR2C antibody at 1:2000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 52, 29 kDa Observed band size: 75 kDa



IHC image of CSB-RA616248A0HU diluted at 1:100 and staining in paraffin-embedded human brain tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

HTR2C encodes the serotonin receptor 2C, also known as 5-HTR2C, which is a class G protein-coupled receptor (GPCR) highly expressed in the hypothalamus and brain stem, where it has been demonstrated to regulate energy homeostasis, including feeding and glucose metabolism. Mice with 5-HTR2C knockout had an increase in food intake, insulin resistance, and obesity, but pharmacological activation of the 5-HTR2C inhibited food intake. Central 5-HTR2C is also implicated in metabolic illnesses including diabetes and obesity, according to pharmacological research utilizing its agonists or antagonists.

The recombinant HTR2C antibody expression is induced in mammalian cells transfected with a recombinant plasma vector. The recombinant plasma vector was constructed by inserting the gene coding for the antibody against HTR2C into the plasma. The recombinant HTR2C antibody was purified from the cell culture medium using Affinity-chromatography. It can react with samples containing HTR2C protein from Human and has been validated for use in the ELISA, WB, IHC.