

HTR2B Antibody (C-term E423)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11124a

Specification

HTR2B Antibody (C-term E423) - Product Information

Application	WB, IHC-P,E
Primary Accession	P41595
Other Accession	NP_000858.3
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	408-435

HTR2B Antibody (C-term E423) - Additional Information

Gene ID 3357

Other Names

5-hydroxytryptamine receptor 2B, 5-HT-2B, 5-HT2B, Serotonin receptor 2B, HTR2B

Target/Specificity

This HTR2B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 408-435 amino acids from the C-terminal region of human HTR2B.

Dilution

WB~~1:2000

IHC-P~~1:25

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

HTR2B Antibody (C-term E423) is for research use only and not for use in diagnostic or therapeutic procedures.

HTR2B Antibody (C-term E423) - Protein Information

Name HTR2B ([HGNC:5294](#))

Function G-protein coupled receptor for 5-hydroxytryptamine (serotonin) (PubMed:[18703043](#), PubMed:[23519210](#), PubMed:[7926008](#), PubMed:[8078486](#), PubMed:[8143856](#), PubMed:[8882600](#)).

Also functions as a receptor for various ergot alkaloid derivatives and psychoactive substances (PubMed:[12970106](#), PubMed:[18703043](#), PubMed:[23519210](#), PubMed:[23519215](#), PubMed:[24357322](#), PubMed:[28129538](#), PubMed:[30127358](#), PubMed:[36087581](#), PubMed:[7926008](#), PubMed:[8078486](#), PubMed:[8143856](#)). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors (PubMed:[23519215](#), PubMed:[28129538](#), PubMed:[8078486](#), PubMed:[8143856](#), PubMed:[8882600](#)). HTR2B 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:[23519215](#), PubMed:[28129538](#), PubMed:[30127358](#), PubMed:[36087581](#), PubMed:[8078486](#), PubMed:[8143856](#), PubMed:[8882600](#)). Beta-arrestin family members inhibit signaling via G proteins and mediate activation of alternative signaling pathways (PubMed:[23519215](#), PubMed:[28129538](#), PubMed:[30127358](#), PubMed:[36087581](#)). Plays a role in the regulation of dopamine and 5-hydroxytryptamine release, 5-hydroxytryptamine uptake and in the regulation of extracellular dopamine and 5-hydroxytryptamine levels, and thereby affects neural activity. May play a role in the perception of pain (By similarity). Plays a role in the regulation of behavior, including impulsive behavior (PubMed:[21179162](#)). Required for normal proliferation of embryonic cardiac myocytes and normal heart development (By similarity). Protects cardiomyocytes against apoptosis (By similarity). Plays a role in the adaptation of pulmonary arteries to chronic hypoxia (By similarity). Plays a role in vasoconstriction (By similarity). Required for normal osteoblast function and proliferation, and for maintaining normal bone density (By similarity). Required for normal proliferation of the interstitial cells of Cajal in the intestine (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein. Synapse, synaptosome
{ECO:0000250|UniProtKB:Q02152}

Tissue Location

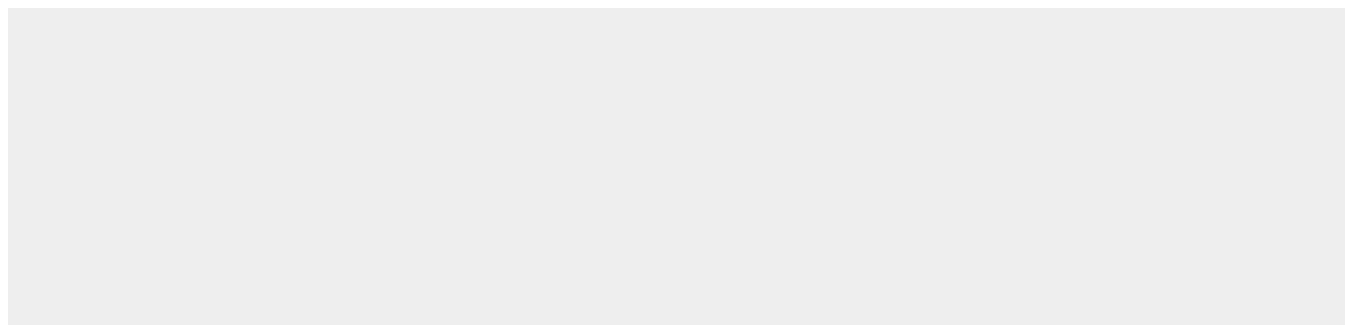
Ubiquitous. Detected in liver, kidney, heart, pulmonary artery, and intestine. Detected at lower levels in blood, placenta and brain, especially in cerebellum, occipital cortex and frontal cortex.

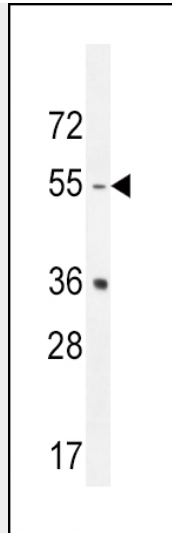
HTR2B Antibody (C-term E423) - Protocols

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

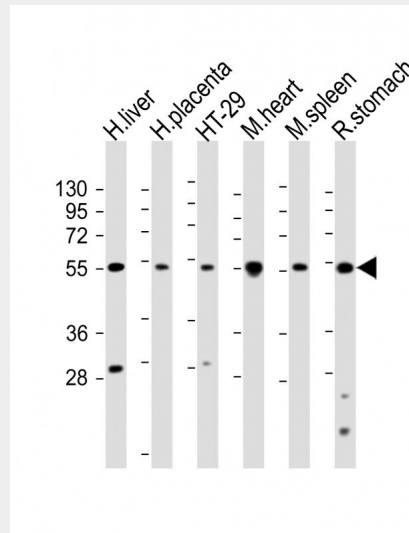
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

HTR2B Antibody (C-term E423) - Images

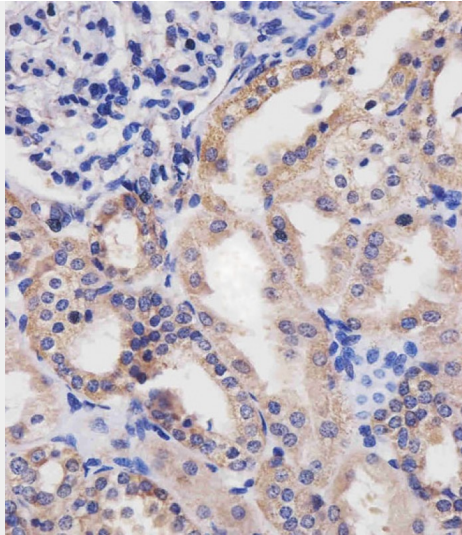




HTR2B Antibody (C-term E423) (Cat. #AP11124a) western blot analysis in mouse spleen tissue lysates (35ug/lane). This demonstrates the HTR2B antibody detected the HTR2B protein (arrow).



All lanes : Anti-HTR2B Antibody (C-term E423) at 1:2000 dilution Lane 1: human liver lysate Lane 2: human placenta lysate Lane 3: HT-29 whole cell lysate Lane 4: mouse heart lysate Lane 5: mouse spleen lysate Lane 6: rat stomach lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 54 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



AP11124a staining HTR2B in human kidney tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

HTR2B Antibody (C-term E423) - Background

Multiple receptor subtypes of serotonin neurotransmitters with multiple physiologic functions have been recognized. The 5-HT-2 receptors mediate many of the central and peripheral physiologic functions of serotonin. Cardiovascular effects include contraction of blood vessels and shape changes in platelets; central nervous system effects include neuronal sensitization to tactile stimuli and mediation of hallucinogenic effects of phenylisopropylamine hallucinogens.

HTR2B Antibody (C-term E423) - References

Bailey, S.D., et al. *Diabetes Care* 33(10):2250-2253(2010) Roberts, K.E., et al. *Gastroenterology* 139(1):130-139(2010) Svejda, B., et al. *Cancer* 116(12):2902-2912(2010) Talmud, P.J., et al. *Am. J. Hum. Genet.* 85(5):628-642(2009) Tabakoff, B., et al. *BMC Biol.* 7, 70 (2009) :

HTR2B Antibody (C-term E423) - Citations

- [Chronic restraint stress reduces carbon tetrachloride-induced liver fibrosis.](#)