

HTR1B Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14575c

Specification

HTR1B Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>P28222</u> <u>P49144, P79399, NP_000854.1, O0EAB5</u> Human Horse, Pig, Rabbit Rabbit Polyclonal Rabbit IgG 43568 225-253

HTR1B Antibody (Center) - Additional Information

Gene ID 3351

Other Names 5-hydroxytryptamine receptor 1B, 5-HT-1B, 5-HT1B, S12, Serotonin 1D beta receptor, 5-HT-1D-beta, Serotonin receptor 1B, HTR1B, HTR1DB

Target/Specificity

This HTR1B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 225-253 amino acids from the Central region of human HTR1B.

Dilution

WB~~1:1000 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

HTR1B Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

HTR1B Antibody (Center) - Protein Information

Name HTR1B (<u>HGNC:5287</u>)



Synonyms HTR1DB

Function G-protein coupled receptor for 5-hydroxytryptamine (serotonin) (PubMed:10452531, PubMed:1315531, PubMed:1328844, PubMed:1348246, PubMed:1351684, PubMed:1559993, PubMed:1565658, PubMed:1610347, PubMed:23519210, PubMed:23519215, PubMed:29925951, PubMed:<u>8218242</u>). Also functions as a receptor for ergot alkaloid derivatives, various anxiolytic and antidepressant drugs and other psychoactive substances, such as lysergic acid diethylamide (LSD) (PubMed:23519210, PubMed:23519215, PubMed:29925951). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors, such as adenylate cyclase (PubMed:10452531, PubMed:1315531, PubMed:1328844, PubMed:1348246, PubMed:1351684, PubMed:1559993, PubMed:1565658, PubMed:1610347, PubMed:23519210, PubMed:23519215, PubMed: 29925951, PubMed: 8218242). HTR1B is coupled to G(i)/G(o) G alpha proteins and mediates inhibitory neurotransmission by inhibiting adenylate cyclase activity (PubMed: 29925951, PubMed:<u>35610220</u>). Arrestin family members inhibit signaling via G proteins and mediate activation of alternative signaling pathways (PubMed: 29925951). Regulates the release of 5-hydroxytryptamine, dopamine and acetylcholine in the brain, and thereby affects neural activity, nociceptive processing, pain perception, mood and behavior (PubMed: 18476671, PubMed:20945968). Besides, plays a role in vasoconstriction of cerebral arteries (PubMed:<u>15853772</u>).

Cellular Location Cell membrane; Multi-pass membrane protein

Tissue Location

Detected in cerebral artery smooth muscle cells (at protein level). Detected in brain cortex, striatum, amygdala, medulla, hippocampus, caudate nucleus and putamen.

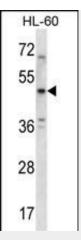
HTR1B Antibody (Center) - Protocols

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

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

HTR1B Antibody (Center) - Images





HTR1B Antibody (Center) (Cat. #AP14575c) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the HTR1B antibody detected the HTR1B protein (arrow).

HTR1B Antibody (Center) - Background

The neurotransmitter serotonin (5-hydroxytryptamine; 5-HT) exerts a wide variety of physiologic functions through a multiplicity of receptors and may be involved in human neuropsychiatric disorders such as anxiety, depression, or migraine. These receptors consist of several main groups subdivided into several distinct subtypes on the basis of their pharmacologic characteristics, coupling to intracellular second messengers, and distribution within the nervous system (Zifa and Fillion, 1992 [PubMed 1359584]). The serotonergic receptors belong to the multigene family of receptors coupled to guanine nucleotide-binding proteins.

HTR1B Antibody (Center) - References

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) Mekli, K., et al. Eur Neuropsychopharmacol (2010) In press : Pinheiro, A.P., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (5), 1070-1080 (2010) : Cross, D.S., et al. BMC Genet. 11, 51 (2010) :