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Goat Anti-Serotonin receptor 1B / HTR1B Antibody

Peptide-affinity purified goat antibody
Catalog # AF1973a

Specification

Goat Anti-Serotonin receptor 1B / HTR1B Antibody - Product Information

Application	**WB, E**
Primary Accession	P28222
Other Accession	NP_000854, 3351, 15551 (mouse), 25075 (rat)
Reactivity	**Human**
Predicted	**Mouse, Rat, Pig, Dog, Cat**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**43568**

Goat Anti-Serotonin receptor 1B / HTR1B Antibody - 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

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-Serotonin receptor 1B / HTR1B Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-Serotonin receptor 1B / HTR1B Antibody - Protein Information

Name HTR1B (HGNC:5287)

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:8218242). 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:35610220). 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:15853772).

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.

Goat Anti-Serotonin receptor 1B / HTR1B Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-Serotonin receptor 1B / HTR1B Antibody - Images

AF1973a (2 µg/ml) staining of Human Brain lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-Serotonin receptor 1B / HTR1B Antibody - 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.

Goat Anti-Serotonin receptor 1B / HTR1B Antibody - References

The HTR1A and HTR1B receptor genes influence stress-related information processing. Mekli K, et al. Eur Neuropsychopharmacol, 2010 Jul 16. PMID 20638825.
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Population based allele frequencies of disease associated polymorphisms in the Personalized Medicine Research Project. Cross DS, et al. BMC Genet, 2010 Jun 17. PMID 20565774.
Evidence of complex involvement of serotonergic genes with restrictive and binge purge subtypes of anorexia nervosa. Kiezebrink K, et al. World J Biol Psychiatry, 2010 Sep. PMID 20545463.
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