

**5HT1B Receptor Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP54436****Specification****5HT1B Receptor Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IHC-F, IF
Primary Accession	<a href="#">P28222</a>
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	44 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human 5-HT1B
Epitope Specificity	121-220/390
Isotype	IgG
<b>Purity</b>	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane; Multi-pass membrane protein.
SIMILARITY	Belongs to the G-protein coupled receptor 1 family.
Post-translational modifications	Phosphorylated. Desensitization of the receptor may be mediated by its phosphorylation. Palmitoylated.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Background Descriptions**

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.[supplied by OMIM, Oct 2009].

**5HT1B Receptor Polyclonal 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  
IHC-P~N/A  
IHC-F~N/A  
IF~1:50~200

**Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glycerol

**Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

**5HT1B Receptor Polyclonal Antibody - Protein Information**

**Name** HTR1B ([HGNC:5287](#))

**Synonyms** HTR1DB

**Function**

G-protein coupled receptor for 5-hydroxytryptamine (serotonin) (PubMed:[10452531](http://www.uniprot.org/citations/10452531), PubMed:[1315531](http://www.uniprot.org/citations/1315531), PubMed:[1328844](http://www.uniprot.org/citations/1328844), PubMed:[1348246](http://www.uniprot.org/citations/1348246), PubMed:[1351684](http://www.uniprot.org/citations/1351684), PubMed:[1559993](http://www.uniprot.org/citations/1559993), PubMed:[1565658](http://www.uniprot.org/citations/1565658), PubMed:[1610347](http://www.uniprot.org/citations/1610347), PubMed:[23519210](http://www.uniprot.org/citations/23519210), PubMed:[23519215](http://www.uniprot.org/citations/23519215), PubMed:[29925951](http://www.uniprot.org/citations/29925951), PubMed:[8218242](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/23519210), PubMed:[23519215](http://www.uniprot.org/citations/23519215), PubMed:[29925951](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/10452531), PubMed:[1315531](http://www.uniprot.org/citations/1315531), PubMed:[1328844](http://www.uniprot.org/citations/1328844), PubMed:[1348246](http://www.uniprot.org/citations/1348246), PubMed:[1351684](http://www.uniprot.org/citations/1351684), PubMed:[1559993](http://www.uniprot.org/citations/1559993), PubMed:[1565658](http://www.uniprot.org/citations/1565658), PubMed:[1610347](http://www.uniprot.org/citations/1610347), PubMed:[23519210](http://www.uniprot.org/citations/23519210), PubMed:[23519215](http://www.uniprot.org/citations/23519215), PubMed:[29925951](http://www.uniprot.org/citations/29925951), PubMed:[8218242](http://www.uniprot.org/citations/8218242)). HTR1B is coupled to G(i)/G(o) G alpha proteins and mediates inhibitory neurotransmission by inhibiting adenylate cyclase activity (PubMed:[29925951](http://www.uniprot.org/citations/29925951), PubMed:[35610220](http://www.uniprot.org/citations/35610220)). Arrestin

family members inhibit signaling via G proteins and mediate activation of alternative signaling pathways (PubMed:<a href="http://www.uniprot.org/citations/29925951" target="\_blank">29925951</a>). 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:<a href="http://www.uniprot.org/citations/18476671" target="\_blank">18476671</a>, PubMed:<a href="http://www.uniprot.org/citations/20945968" target="\_blank">20945968</a>). Besides, plays a role in vasoconstriction of cerebral arteries (PubMed:<a href="http://www.uniprot.org/citations/15853772" target="\_blank">15853772</a>).

#### **Cellular Location**

Cell membrane; Multi-pass membrane protein

#### **Tissue Location**

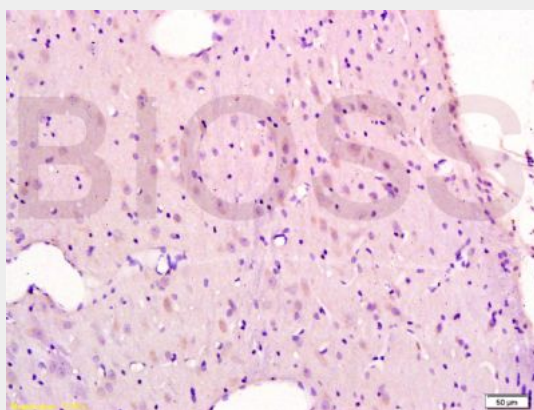
Detected in cerebral artery smooth muscle cells (at protein level). Detected in brain cortex, striatum, amygdala, medulla, hippocampus, caudate nucleus and putamen.

### **5HT1B Receptor Polyclonal 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 Cytometry](#)
- [Cell Culture](#)

### **5HT1B Receptor Polyclonal Antibody - Images**



Tissue/cell: rat brain tissue(Snr); 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-5-HTR1B Polyclonal Antibody, Unconjugated(bs-1125R) 1:300, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining