

# 5HT1B Receptor Rabbit pAb

5HT1B Receptor Rabbit pAb Catalog # AP54436

#### **Product Information**

**Application** WB, IHC-P, IHC-F, IF

Primary Accession P28222
Reactivity Mouse, Rat

**Predicted** Human, Chicken, Dog, Pig, Horse, Rabbit

Host Rabbit
Clonality Polyclonal
Calculated MW 43568
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human 5-HTR1B

Epitope Specificity 121-220/390

**Isotype** IgG

**Purity** 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** Phosphorylated. Desensitization of the receptor may be mediated by its

**modifications** 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].

#### **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 (HGNC:5287), HTR1DB

**Dilution** WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500

**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.

#### **Protein Information**

Name HTR1B ( HGNC:5287)

Synonyms HTR1DB

**Function** G-protein coupled receptor for 5-hydroxytryptamine (serotonin)

(PubMed:<u>10452531</u>, PubMed:<u>1315531</u>, PubMed:<u>1328844</u>, PubMed:<u>1348246</u>, PubMed:<u>1351684</u>, PubMed:<u>1559993</u>, PubMed:<u>1565658</u>, PubMed:<u>1610347</u>,

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:<u>23519210</u>,

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:<u>29925951</u>). 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.

## **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.[supplied by OMIM, Oct 2009].

### **Images**

Sample:

Lane 1: Mouse Cerebrum tissue lysates
Lane 2: Rat Placenta tissue lysates

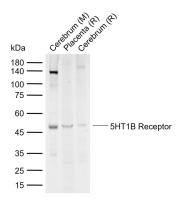
Lane 3: Rat Cerebrum tissue lysates

Primary: Anti-5HT1B Receptor (AP54436) at 1/1000

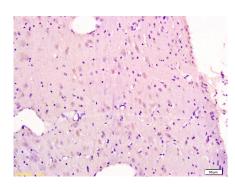
dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000

dilution



Predicted band size: 44 kDa Observed band size: 48 kDa



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(AP54436) 1:300, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.