

**5-HT1A Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP51274**

### Specification

#### 5-HT1A Antibody - Product Information

|                   |                        |
|-------------------|------------------------|
| Application       | WB                     |
| Primary Accession | <a href="#">P08908</a> |
| Reactivity        | Human, Rat             |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |
| Calculated MW     | 46 KDa                 |
| Antigen Region    | 291 - 350              |

#### 5-HT1A Antibody - Additional Information

**Gene ID** 3350

##### Other Names

5-hydroxytryptamine receptor 1A, 5-HT-1A, 5-HT1A, G-21, Serotonin receptor 1A, HTR1A, ADRB2RL1, ADRBRL1

##### Target/Specificity

KLH conjugated synthetic peptide derived from human 5-HT1A

##### Dilution

WB~~ 1:1000

##### Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

##### Storage

Store at -20 °C. Stable for 12 months from date of receipt

#### 5-HT1A Antibody - Protein Information

**Name** [HTR1A \(HGNC:5286\)](#)

**Synonyms** ADRB2RL1, ADRBRL1

##### Function

G-protein coupled receptor for 5-hydroxytryptamine (serotonin) (PubMed:[22957663](http://www.uniprot.org/citations/22957663), PubMed:[3138543](http://www.uniprot.org/citations/3138543), PubMed:[33762731](http://www.uniprot.org/citations/33762731), PubMed:[37935376](http://www.uniprot.org/citations/37935376), PubMed:[37935377](http://www.uniprot.org/citations/37935377), PubMed:[8138923](http://www.uniprot.org/citations/8138923), PubMed:[22957663](http://www.uniprot.org/citations/22957663), PubMed:[3138543](http://www.uniprot.org/citations/3138543), PubMed:[33762731](http://www.uniprot.org/citations/33762731), PubMed:[37935376](http://www.uniprot.org/citations/37935376), PubMed:[37935377](http://www.uniprot.org/citations/37935377), PubMed:[8138923](http://www.uniprot.org/citations/8138923))

href="http://www.uniprot.org/citations/8393041" target="\_blank">>8393041</a>). Also functions as a receptor for various drugs and psychoactive substances (PubMed:<a href="http://www.uniprot.org/citations/22957663" target="\_blank">>22957663</a>, PubMed:<a href="http://www.uniprot.org/citations/3138543" target="\_blank">>3138543</a>, PubMed:<a href="http://www.uniprot.org/citations/33762731" target="\_blank">>33762731</a>, PubMed:<a href="http://www.uniprot.org/citations/38552625" target="\_blank">>38552625</a>, PubMed:<a href="http://www.uniprot.org/citations/8138923" target="\_blank">>8138923</a>, PubMed:<a href="http://www.uniprot.org/citations/8393041" target="\_blank">>8393041</a>). 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:<a href="http://www.uniprot.org/citations/22957663" target="\_blank">>22957663</a>, PubMed:<a href="http://www.uniprot.org/citations/3138543" target="\_blank">>3138543</a>, PubMed:<a href="http://www.uniprot.org/citations/33762731" target="\_blank">>33762731</a>, PubMed:<a href="http://www.uniprot.org/citations/8138923" target="\_blank">>8138923</a>, PubMed:<a href="http://www.uniprot.org/citations/8393041" target="\_blank">>8393041</a>). HTR1A is coupled to G(i)/G(o) G alpha proteins and mediates inhibitory neurotransmission: signaling inhibits adenylate cyclase activity and activates a phosphatidylinositol-calcium second messenger system that regulates the release of Ca(2+) ions from intracellular stores (PubMed:<a href="http://www.uniprot.org/citations/33762731" target="\_blank">>33762731</a>, PubMed:<a href="http://www.uniprot.org/citations/35610220" target="\_blank">>35610220</a>). Beta-arrestin family members regulate signaling by mediating both receptor desensitization and resensitization processes (PubMed:<a href="http://www.uniprot.org/citations/18476671" target="\_blank">>18476671</a>, PubMed:<a href="http://www.uniprot.org/citations/20363322" target="\_blank">>20363322</a>, PubMed:<a href="http://www.uniprot.org/citations/20945968" target="\_blank">>20945968</a>). Plays a role in the regulation of 5-hydroxytryptamine release and in the regulation of dopamine and 5-hydroxytryptamine metabolism (PubMed:<a href="http://www.uniprot.org/citations/18476671" target="\_blank">>18476671</a>, PubMed:<a href="http://www.uniprot.org/citations/20363322" target="\_blank">>20363322</a>, PubMed:<a href="http://www.uniprot.org/citations/20945968" target="\_blank">>20945968</a>). Plays a role in the regulation of dopamine and 5-hydroxytryptamine levels in the brain, and thereby affects neural activity, mood and behavior (PubMed:<a href="http://www.uniprot.org/citations/18476671" target="\_blank">>18476671</a>, PubMed:<a href="http://www.uniprot.org/citations/20363322" target="\_blank">>20363322</a>, PubMed:<a href="http://www.uniprot.org/citations/20945968" target="\_blank">>20945968</a>). Plays a role in the response to anxiogenic stimuli (PubMed:<a href="http://www.uniprot.org/citations/18476671" target="\_blank">>18476671</a>, PubMed:<a href="http://www.uniprot.org/citations/20363322" target="\_blank">>20363322</a>, PubMed:<a href="http://www.uniprot.org/citations/20945968" target="\_blank">>20945968</a>).

### Cellular Location

Cell membrane; Multi-pass membrane protein. Cell projection, dendrite {ECO:0000250|UniProtKB:P19327}

### Tissue Location

Detected in lymph nodes, thymus and spleen. Detected in activated T-cells, but not in resting T-cells

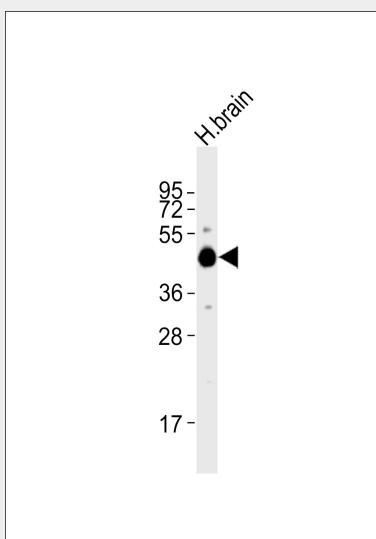
### 5-HT1A Antibody - Protocols

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](#)

### 5-HT1A Antibody - Images



Anti-5-HT1A Antibody at 1:1000 dilution + human brain lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 46 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

### 5-HT1A Antibody - Background

G-protein coupled receptor for 5-hydroxytryptamine (serotonin). Also functions as a receptor for various drugs and psychoactive substances. Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of down-stream effectors, such as adenylate cyclase. Beta-arrestin family members inhibit signaling via G proteins and mediate activation of alternative signaling pathways. Signaling inhibits adenylate cyclase activity and activates a phosphatidylinositol-calcium second messenger system that regulates the release of Ca(2+) ions from intracellular stores. Plays a role in the regulation of 5-hydroxytryptamine release and in the regulation of dopamine and 5-hydroxytryptamine metabolism. Plays a role in the regulation of dopamine and 5-hydroxytryptamine levels in the brain, and thereby affects neural activity, mood and behavior. Plays a role in the response to anxiogenic stimuli.

### 5-HT1A Antibody - References

- Kobilka B.K.,et al.Nature 329:75-79(1987).  
Saltzman A.G.,et al.Submitted (FEB-1991) to the EMBL/GenBank/DDBJ databases.  
Levy F.O.,et al.Submitted (MAY-1992) to the EMBL/GenBank/DDBJ databases.  
Kitano T.,et al.Mol. Biol. Evol. 21:936-944(2004).  
Puhl H.L. III,et al.Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.