

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

**Specification**

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**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: <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/37935376" target="\_blank">37935376</a>, PubMed: <a href="http://www.uniprot.org/citations/37935377" target="\_blank">37935377</a>, PubMed: <a href="http://www.uniprot.org/citations/8138923" target="\_blank">8138923</a>, PubMed: <a

[8393041](http://www.uniprot.org/citations/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

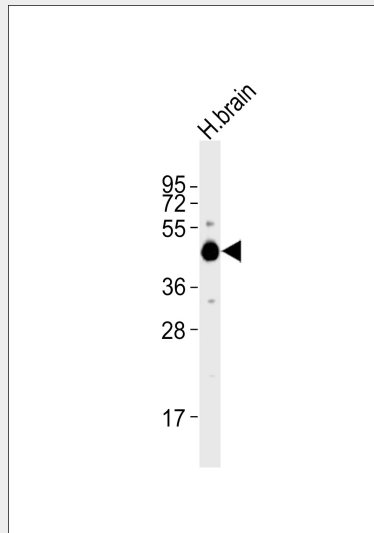
## 5-HT1A Antibody - Protocols

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.