

[8393041](http://www.uniprot.org/citations/8393041)). Also functions as a receptor for various drugs and psychoactive substances (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:[38552625](http://www.uniprot.org/citations/38552625), PubMed:[8138923](http://www.uniprot.org/citations/8138923), PubMed:[8393041](http://www.uniprot.org/citations/8393041)). 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:[22957663](http://www.uniprot.org/citations/22957663), PubMed:[3138543](http://www.uniprot.org/citations/3138543), PubMed:[33762731](http://www.uniprot.org/citations/33762731), PubMed:[8138923](http://www.uniprot.org/citations/8138923), PubMed:[8393041](http://www.uniprot.org/citations/8393041)). 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:[33762731](http://www.uniprot.org/citations/33762731), PubMed:[35610220](http://www.uniprot.org/citations/35610220)). Beta-arrestin family members regulate signaling by mediating both receptor desensitization and resensitization processes (PubMed:[18476671](http://www.uniprot.org/citations/18476671), PubMed:[20363322](http://www.uniprot.org/citations/20363322), PubMed:[20945968](http://www.uniprot.org/citations/20945968)). Plays a role in the regulation of 5- hydroxytryptamine release and in the regulation of dopamine and 5- hydroxytryptamine metabolism (PubMed:[18476671](http://www.uniprot.org/citations/18476671), PubMed:[20363322](http://www.uniprot.org/citations/20363322), PubMed:[20945968](http://www.uniprot.org/citations/20945968)). Plays a role in the regulation of dopamine and 5- hydroxytryptamine levels in the brain, and thereby affects neural activity, mood and behavior (PubMed:[18476671](http://www.uniprot.org/citations/18476671), PubMed:[20363322](http://www.uniprot.org/citations/20363322), PubMed:[20945968](http://www.uniprot.org/citations/20945968)). Plays a role in the response to anxiogenic stimuli (PubMed:[18476671](http://www.uniprot.org/citations/18476671), PubMed:[20363322](http://www.uniprot.org/citations/20363322), PubMed:[20945968](http://www.uniprot.org/citations/20945968)).

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

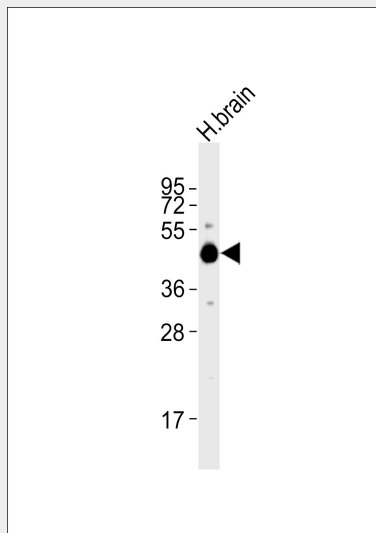
5-HT1A Antibody - Protocols

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

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