

5-HT2A Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51940**Specification**

5-HT2A Antibody - Product Information

Application	WB, E
Primary Accession	P28223
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	53 KDa

5-HT2A Antibody - Additional Information**Gene ID** 3356**Other Names**

5-hydroxytryptamine receptor 2A, 5-HT-2, 5-HT-2A, Serotonin receptor 2A, HTR2A, HTR2

Dilution

WB~~1:1000

E~~N/A

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-HT2A Antibody - Protein Information**Name** HTR2A ([HGNC:5293](#))**Synonyms** HTR2**Function**

G-protein coupled receptor for 5-hydroxytryptamine (serotonin) (PubMed: [1330647](http://www.uniprot.org/citations/1330647), PubMed: [18703043](http://www.uniprot.org/citations/18703043), PubMed: [19057895](http://www.uniprot.org/citations/19057895), PubMed: [21645528](http://www.uniprot.org/citations/21645528), PubMed: [22300836](http://www.uniprot.org/citations/22300836), PubMed: [35084960](http://www.uniprot.org/citations/35084960), PubMed: [38552625](http://www.uniprot.org/citations/38552625)). Also functions as a receptor for various drugs and psychoactive substances, including mescaline, psilocybin, 1-(2,5-dimethoxy-4-iodophenyl)-2-aminopropane (DOI) and lysergic acid diethylamide (LSD) (PubMed: [28129538](http://www.uniprot.org/citations/28129538))

target="_blank">28129538, PubMed:35084960). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors (PubMed:28129538, PubMed:35084960). HTR2A is coupled to G(q)/G(11) G alpha proteins and activates phospholipase C-beta, releasing diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) second messengers that modulate the activity of phosphatidylinositol 3-kinase and promote the release of Ca(2+) ions from intracellular stores, respectively (PubMed:18703043, PubMed:28129538, PubMed:35084960). Beta-arrestin family members inhibit signaling via G proteins and mediate activation of alternative signaling pathways (PubMed:28129538, PubMed:35084960). Affects neural activity, perception, cognition and mood (PubMed:18297054). Plays a role in the regulation of behavior, including responses to anxiogenic situations and psychoactive substances. Plays a role in intestinal smooth muscle contraction, and may play a role in arterial vasoconstriction (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein. Cell projection, dendrite {ECO:0000250|UniProtKB:P35363}. Cell projection, axon {ECO:0000250|UniProtKB:P14842}. Cytoplasmic vesicle {ECO:0000250|UniProtKB:P14842}. Membrane, caveola {ECO:0000250|UniProtKB:P14842}. Presynapse {ECO:0000250|UniProtKB:P14842}

Tissue Location

Detected in brain cortex (at protein level). Detected in blood platelets.

5-HT2A 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-HT2A Antibody - Images

5-HT2A Antibody - Background

G-protein coupled receptor for 5-hydroxytryptamine (serotonin). Also functions as a receptor for various drugs and psychoactive substances, including mescaline, psilocybin, 1-(2,5-dimethoxy-4-iodophenyl)-2-aminopropane (DOI) and lysergic acid diethylamide (LSD). Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of downstream effectors. Beta-arrestin family members inhibit signaling via G proteins and mediate activation of alternative signaling pathways. Signaling activates phospholipase C and a phosphatidylinositol-calcium second messenger system that modulates the activity of phosphatidylinositol 3-kinase and promotes the release of Ca(2+) ions from intracellular stores. Affects neural activity, perception, cognition and mood. Plays a role in

the regulation of behavior, including responses to anxiogenic situations and psychoactive substances. Plays a role in intestinal smooth muscle contraction, and may play a role in arterial vasoconstriction.

5-HT_{2A} Antibody - References

Saltzman A.G., et al. Biochem. Biophys. Res. Commun. 181:1469-1478(1991).
Chen K., et al. Brain Res. Mol. Brain Res. 14:20-26(1992).
Cook E.H. Jr., et al. J. Neurochem. 63:465-469(1994).
Puhl H.L. III, et al. Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.
Ota T., et al. Nat. Genet. 36:40-45(2004).