

5-HT2A Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51940

Specification

5-HT2A Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW

WB, E
P28223
Human, Mouse, Rat
Rabbit
Polyclonal

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, PubMed:18703043, PubMed:19057895, PubMed:21645528, PubMed:22300836, PubMed:35084960, PubMed: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:<a href="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:<a href="http://www.uniprot.org/citations/35084960"

target="_blank">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.

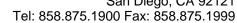
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

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 down-stream 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-HT2A 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).