

Anti-5-HT2A Antibody

Catalog # AP53685

Product Information

Application WB Primary Accession P28223

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW52603

Additional Information

Gene ID 3356

Other Names HTR2; 5-hydroxytryptamine receptor 2A; 5-HT-2; 5-HT-2A; Serotonin receptor

2A

Target/Specificity Recognizes endogenous levels of 5-HT2A protein.

Dilution WB~~1/500 - 1/1000

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30%

glycerol, and 0.09% (W/V) sodium azide.

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

Protein Information

Name HTR2A (HGNC:5293)

Synonyms HTR2

Function G-protein coupled receptor for 5-hydroxytryptamine (serotonin)

(PubMed:<u>1330647</u>, PubMed:<u>18703043</u>, PubMed:<u>19057895</u>, PubMed:<u>21645528</u>, PubMed:<u>22300836</u>, PubMed:<u>35084960</u>,

PubMed:<u>38552625</u>). 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, 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:<u>18703043</u>, PubMed:<u>28129538</u>, PubMed:<u>35084960</u>). Beta-arrestin family members inhibit signaling via G proteins and mediate activation of alternative signaling pathways (PubMed:<u>28129538</u>, PubMed:<u>35084960</u>). Affects neural activity, perception, cognition and mood (PubMed:<u>18297054</u>). 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}

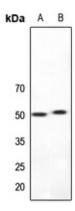
Tissue Location

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

Background

Rabbit polyclonal antibody to 5-HT2A

Images



Western blot analysis of 5-HT2A expression in mouse kidney (A), rat kidney (B) whole cell lysates.

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