

HTR1A Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP20616c

Product Information

Application WB, FC, E **Primary Accession** P08908 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB46792 Calculated MW 46107

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 This HTR1A antibody is generated from a rabbit immunized with a KLH

conjugated synthetic peptide between 239-273 amino acids from the Central

region of human HTR1A.

Dilution WB~~1:1000 FC~~1:25 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This

antibody is purified through a protein A column, followed by peptide affinity

purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions HTR1A Antibody (Center) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name HTR1A (HGNC:5286)

Synonyms ADRB2RL1, ADRBRL1

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

(PubMed:22957663, PubMed:3138543, PubMed:33762731,

PubMed:<u>37935376</u>, PubMed:<u>37935377</u>, PubMed:<u>8138923</u>, PubMed:<u>8393041</u>).

Also functions as a receptor for various drugs and psychoactive substances (PubMed:22957663, PubMed:3138543, PubMed:33762731, PubMed:38552625, PubMed:8138923, PubMed: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, PubMed:3138543, PubMed:33762731, PubMed:8138923, PubMed: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, PubMed:35610220). Beta-arrestin family members regulate signaling by mediating both receptor desensitization and resensitization processes (PubMed: 18476671, PubMed: 20363322, PubMed: 20945968). Plays a role in the regulation of 5- hydroxytryptamine release and in the regulation of dopamine and 5- hydroxytryptamine metabolism (PubMed: 18476671, PubMed:20363322, PubMed: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, PubMed: 20363322, PubMed: 20945968). Plays a role in the response to anxiogenic stimuli (PubMed: 18476671, PubMed: 20363322, PubMed: 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

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.

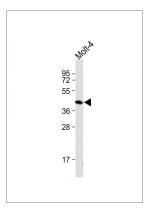
References

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.

Images

All lanes: Anti-HTR1A Antibody (Center) at 1:1000 dilution Lane 1: Molt-4 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Observed



band size : 46kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.