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HTR1A antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # AI16209

Product Information

Application WB Primary Accession P08908

Other Accession NM 000524, NP 000515

Reactivity Human
Predicted Human
Host Rabbit
Clonality Polyclonal
Calculated MW 46107

Additional Information

Gene ID 3350

Alias Symbol G-21, 5HT1a, PFMCD, 5-HT1A, 5-HT-1A, ADRBRL1, ADRB2RL1

Other Names 5-hydroxytryptamine receptor 1A, 5-HT-1A, 5-HT1A, G-21, Serotonin receptor

1A, HTR1A, ADRB2RL1, ADRBRL1

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

Reconstitution & Storage Add 100 ul of distilled water. Final anti-HTR1A antibody concentration is 1

mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at

20°C. Avoid repeat freeze-thaw cycles.

Precautions HTR1A antibody - N-terminal region 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:<u>22957663</u>, PubMed:<u>3138543</u>, PubMed:<u>33762731</u>,

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

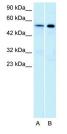
Background

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



WB Suggested Anti-HTR1A Antibody Titration: 0.0625µg/ml

ELISA Titer: 1:62500

Positive Control: Jurkat cell lysate

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