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HTR1A Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20616c

Specification

HTR1A Antibody (Center) - Product Information

Application	**WB, FC,E**
Primary Accession	P08908
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**46107**
Antigen Region	**239-273**

HTR1A Antibody (Center) - 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

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. 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.

HTR1A Antibody (Center) - 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:37935376, PubMed:37935377, PubMed:8138923, PubMed:8393041). 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

HTR1A Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

HTR1A Antibody (Center) - Images

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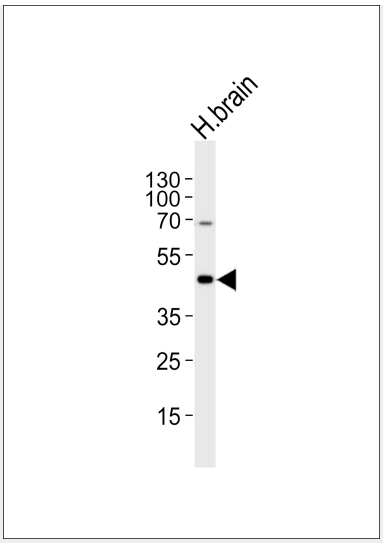
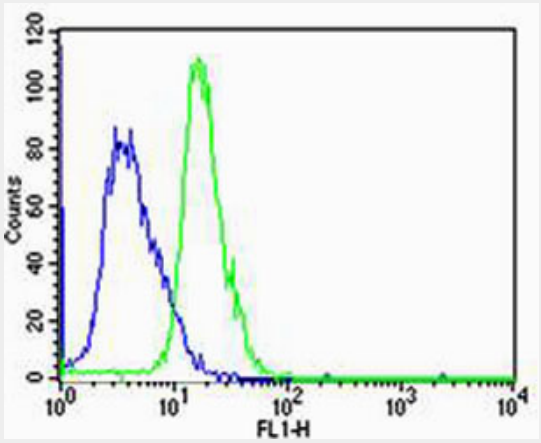


Western blot analysis of lysate from human brain tissue lysate, using HTR1A Antibody (Center)(Cat. #AP20616c). AP20616c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.



Flow cytometric analysis of Jurkat cells using HTR1A Antibody (Center)(green, Cat#AP20616c) compared to an isotype control of rabbit IgG(blue). AP20616c was diluted at 1:25 dilution. An Alexa Fluor® 488 goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody.

HTR1A Antibody (Center) - 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.

HTR1A Antibody (Center) - 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.