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Anti-5HT1A Receptor Antibody
Catalog # ABO10962

Specification

Anti-5HT1A Receptor Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	P08908
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for 5-hydroxytryptamine receptor 1A(HTR1A) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-5HT1A Receptor Antibody - Additional Information

Gene ID 3350

Other Names
5-hydroxytryptamine receptor 1A, 5-HT-1A, 5-HT1A, G-21, Serotonin receptor 1A, HTR1A, ADRB2RL1, ADRBRL1

Calculated MW
46107 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Rat, Human, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization
Cell membrane ; Multi-pass membrane protein .

Tissue Specificity
Detected in lymph nodes, thymus and spleen. Detected in activated T-cells, but not in resting T-cells. .

Protein Name
5-hydroxytryptamine receptor 1A(5-HT-1A/5-HT1A)

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the C-terminus of human 5HT1A Receptor(404-422aa NKDFQNAFKKIIKCKFCRQ), different from the related rat and mouse

sequences by one amino acid.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-5HT1A Receptor Antibody - 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:<a

href="http://www.uniprot.org/citations/20945968" target="_blank">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}

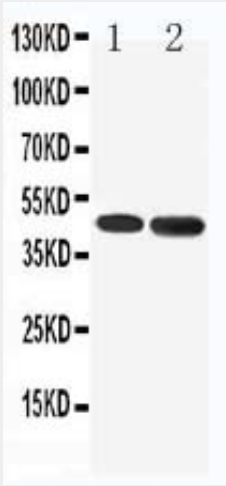
Tissue Location
Detected in lymph nodes, thymus and spleen. Detected in activated T-cells, but not in resting T-cells

Anti-5HT1A Receptor Antibody - 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

Anti-5HT1A Receptor Antibody - Images



Anti-5HT1A Receptor antibody, ABO10962, Western blottingLane 1: Rat Brain Tissue LysateLane 2: Human U87 Cell Lysate

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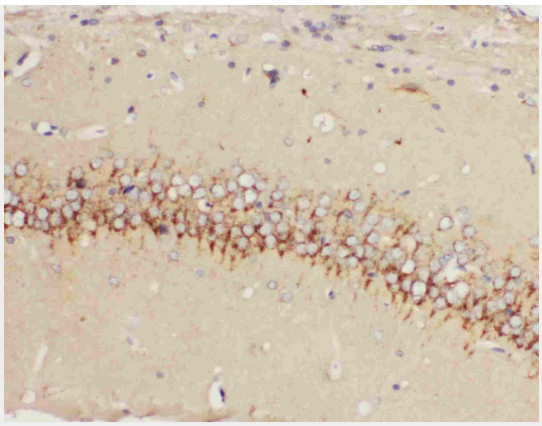

Anti-5HT1A Receptor antibody, ABO10962, IHC(P)IHC(P): Rat Brain Tissue

Anti-5HT1A Receptor Antibody - Background

HTR1A(5-HYDROXYTRYPTAMINE RECEPTOR 1A), also called SEROTONIN 5-HT-1A RECEPTOR or BETA-2-ADRENERGIC RECEPTOR-LIKE PROTEIN G-21, is a subtype of 5-HT receptor that binds the endogenous neurotransmitter serotonin. It is a G protein-coupled receptor(GPCR) that is coupled to Gi/Go and mediates inhibitory neurotransmission. HTR1A denotes the human gene encoding for the receptor.The HTR1A gene is located at 5q12.3. The decreases in 5-HT-1A receptor densities correlated with decreased glucose utilization as measured by PET scan. Activation of 5-HT-1A receptors has been demonstrated to impair cognition, learning, and memory by inhibiting the release of glutamate and acetylcholine in various areas of the brain. 5-HT-1A receptors in the dorsal raphe nucleus are co-localized with neurokinin 1(NK1) receptors and have been shown to inhibit the release of substance P, their endogenous ligand.