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Anti-5HT1A Receptor Antibody

Catalog # ABO10962

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.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Rat, Human, Mouse, By Heat Western blot, 0.1-0.5 □g/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. .
Source	Eukaryota
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.

Protein Information

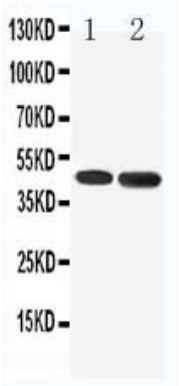
Name	HTR1A (HGNC:5286)
Synonyms	ADRB2RL1, ADRBRL1
Function	G protein-coupled receptor for 5-hydroxytryptamine (serotonin) (PubMed:22957663, PubMed:3138543, PubMed:33762731, PubMed:37935376, PubMed:37935377, PubMed:8138923, PubMed:8393041). Also functions as a receptor for various drugs and psychoactive 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

Background

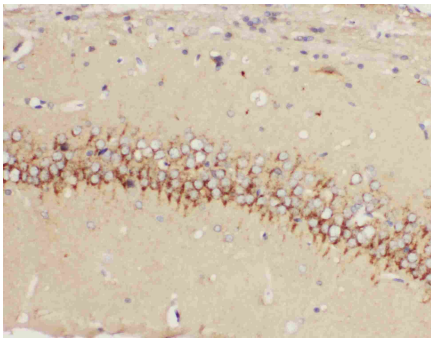
HTR1A(5-HYDROXYTRYPTAMINE RECEPTOR 1A), also called SEROTONIN 5-HT-1A RECEPTOR or BETA-2-ADRENERGIC RECEPTOR-LIKE PROTEIN G-21, is a subtype of 5-HT receptor that binds the endogenous neurotransmitter serotonin. It is a G protein-coupled receptor(GPCR) that is coupled to Gi/Go and mediates inhibitory 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.

Images

Anti-5HT1A Receptor antibody, ABO10962, Western



blottingLane 1: Rat Brain Tissue LysateLane 2: Human U87 Cell Lysate



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

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