

SR-1A Polyclonal Antibody

Catalog # AP72574

Product Information

Application	WB, IHC-P, IF
Primary Accession	<u>P08908</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46107

Additional Information

Gene ID	3350
Other Names	HTR1A; ADRB2RL1; ADRBRL1; 5-hydroxytryptamine receptor 1A; 5-HT-1A; 5-HT1A; G-21; Serotonin receptor 1A
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A IF~~1:50~200
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

Protein Information

Name	HTR1A (<u>HGNC:5286</u>)
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: <u>35610220</u>). Beta-arrestin family members regulate signaling by mediating both receptor desensitization and resensitization processes (PubMed: <u>18476671</u> , PubMed: <u>20363322</u> , PubMed: <u>20945968</u>). Plays a role in the regulation of 5- hydroxytryptamine release and in the regulation of dopamine and 5- hydroxytryptamine metabolism (PubMed: <u>18476671</u> , PubMed: <u>20363322</u> , PubMed: <u>20945968</u>). Plays a role in the regulation of dopamine and 5- hydroxytryptamine levels in the brain, and thereby affects neural activity, mood and behavior (PubMed: <u>18476671</u> , PubMed: <u>20363322</u> , PubMed: <u>20945968</u>). Plays a role in the response to anxiogenic stimuli (PubMed: <u>18476671</u> , PubMed: <u>20363322</u> , PubMed: <u>20945968</u>).
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.

Images



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