

CHRNA6 Rabbit pAb

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Catalog # AP54728

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q15825
Predicted	Rat, Dog, Human, Mouse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56898
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CHRNA6
Epitope Specificity	101-200/494
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell junction, synapse, postsynaptic cell membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Members of the ligand-gated ion channel receptor family are characterized by their fast transmitting response to neurotransmitters. Two important members of this family are the nicotinic acetylcholine and glutamate receptors, both of which are composed of five homologous subunits forming a transmembrane aqueous pore. These transmembrane receptors change conformation in response to their cognate neurotransmitter. Nicotinic acetylcholine receptors (AChRs) are found at the postsynaptic membrane of the neuromuscular junction and bind acetylcholine molecules, allowing ions to move through the pore. AChR alpha 6, also designated cholinergic nicotinic receptor alpha polypeptide 6, is a neuronal acetylcholine receptor protein expressed in respiratory mucosa. AChR alpha 6 is also selectively expressed on dopaminergic terminals, where it complexes with AChR Beta 2 and AChR alpha 4.

Additional Information

Gene ID	8973
Other Names	Neuronal acetylcholine receptor subunit alpha-6, CHRNA6 (HGNC:15963)
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name	CHRNA6 (HGNC:15963)
Function	Component of neuronal acetylcholine receptors (nAChRs) that function as pentameric, ligand-gated cation channels with high calcium permeability among other activities. nAChRs are excitatory neurotransmitter receptors formed by a collection of nAChR subunits known to mediate synaptic transmission in the nervous system and the neuromuscular junction. Each nAChR subunit confers differential attributes to channel properties, including activation, deactivation and desensitization kinetics, pH sensitivity, cation permeability, and binding to allosteric modulators (Probable). CHRNA6 forms pentameric channels with CHRNB2, CHRNB3 and CHRNB4 that exhibit high sensitivity to ACh and nicotine and are predominantly expressed in only a few brain areas, including dopaminergic neurons, norepinephrine neurons and cells of the visual system (PubMed: 16835356). nAChRs containing CHRNA6 subunits mediate endogenous cholinergic modulation of dopamine and gamma-aminobutyric acid (GABA) release in response to nicotine at nerve terminals.
Cellular Location	Synaptic cell membrane {ECO:0000250 UniProtKB:Q9R0W9}; Multi-pass membrane protein

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