

# CHRNA6 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP54728

## Product Information

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<b>Application</b>	WB, IHC-P, IHC-F, IF, ICC, E
<b>Primary Accession</b>	<a href="#">Q15825</a>
<b>Reactivity</b>	Rat, Dog
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	56898
<b>Physical State</b>	Liquid
<b>Immunogen</b>	KLH conjugated synthetic peptide derived from human CHRNA6
<b>Epitope Specificity</b>	101-200/494
<b>Isotype</b>	IgG
<b>Purity</b>	affinity purified by Protein A
<b>Buffer</b>	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
<b>SUBCELLULAR LOCATION</b>	Cell junction, synapse, postsynaptic cell membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein.
<b>SIMILARITY</b>	Belongs to the ligand-gated ion channel (TC 1.A.9) family. Acetylcholine receptor (TC 1.A.9.1) subfamily. Alpha-6/CHRNA6 sub-subfamily.
<b>SUBUNIT</b>	Neuronal AChR seems to be composed of two different types of subunits: alpha and non-alpha (beta).
<b>Important Note</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>Background Descriptions</b>	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

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<b>Gene ID</b>	8973
<b>Other Names</b>	Neuronal acetylcholine receptor subunit alpha-6, CHRNA6
<b>Dilution</b>	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-50

0,ELISA=1:5000-10000

<b>Format</b>	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
<b>Storage</b>	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

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<b>Name</b>	CHRNA6 ( <a href="#">HGNC:15963</a> )
<b>Function</b>	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 CHRNA4 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: <a href="#">16835356</a> ). nAChRs containing CHRNA6 subunits mediate endogenous cholinergic modulation of dopamine and gamma-aminobutyric acid (GABA) release in response to nicotine at nerve terminals.
<b>Cellular Location</b>	Synaptic cell membrane {ECO:0000250 UniProtKB:Q9R0W9}; Multi-pass membrane protein

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