

CHRNA6 Antibody - N-terminal region

Rabbit Polyclonal Antibody

Catalog # AI16217

Product Information

Application	WB
Primary Accession	Q15825
Other Accession	NM_004198 , NP_004189
Reactivity	Human, Mouse, Rat, Dog
Predicted	Human, Mouse, Rat, Chicken, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56898

Additional Information

Gene ID	8973
Alias Symbol	CHNRA6
Other Names	Neuronal acetylcholine receptor subunit alpha-6, CHRNA6
Format	Lyophilized
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-CHRNA6 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	CHRNA6 Antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

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 CHRNA2, CHRNA3 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: 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

Background

After binding acetylcholine, the AChR responds by an extensive change in conformation that affects all subunits and leads to opening of an ion-conducting channel across the plasma membrane.

References

Elliott K.J.,et al.J. Mol. Neurosci. 7:217-228(1996).
Groot Kormelink P.J.,et al.Submitted (JAN-1998) to the EMBL/GenBank/DDBJ databases.
Ebihara M.,et al.Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Nusbaum C.,et al.Nature 439:331-335(2006).

Images



CHRNA6 (cholinergic receptor, nicotinic, alpha 6)
Antibody (against the N terminal of CHRNA6) (50ug)
validated by WB using THP-1 cell lysate
at 0.2-1 µg/ml.

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