

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 neurotrasnmitter 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, norepirephrine 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

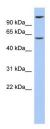
Background

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'.