

CHRNA7 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13898a**Specification**

CHRNA7 Antibody (N-term) - Product Information

Application	WB,E
Primary Accession	P36544
Other Accession	NP_000737.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	56449
Antigen Region	8-37

CHRNA7 Antibody (N-term) - Additional Information**Gene ID** 1139;89832**Other Names**

Neuronal acetylcholine receptor subunit alpha-7, CHRNA7, NACHRA7

Target/Specificity

This CHRNA7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 8-37 amino acids from the N-terminal region of human CHRNA7.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

CHRNA7 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CHRNA7 Antibody (N-term) - Protein Information**Name** CHRNA7**Synonyms** NACHRA7

Function 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. The channel is blocked by alpha-bungarotoxin.

Cellular Location

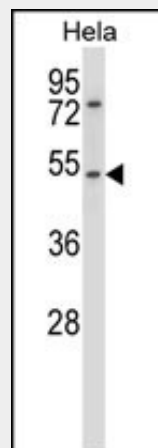
Postsynaptic cell membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Note=TMEM35A/NACHO promotes its trafficking to the cell membrane (PubMed:27789755). RIC3 promotes its trafficking to the cell membrane (By similarity) {ECO:0000250|UniProtKB:Q05941, ECO:0000269|PubMed:27789755}

CHRNA7 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CHRNA7 Antibody (N-term) - Images



CHRNA7 Antibody (N-term) (Cat. #AP13898a) western blot analysis in HeLa cell line lysates (35ug/lane). This demonstrates the CHRNA7 antibody detected the CHRNA7 protein (arrow).

CHRNA7 Antibody (N-term) - Background

The nicotinic acetylcholine receptors (nAChRs) are members of a superfamily of ligand-gated ion channels that mediate fast signal transmission at synapses. The nAChRs are thought to be hetero-pentamers composed of homologous subunits. The proposed structure for each subunit is a conserved N-terminal extracellular domain followed by three conserved transmembrane domains, a variable cytoplasmic loop, a fourth conserved transmembrane domain, and a short C-terminal extracellular region. The protein encoded by this gene forms a homo-oligomeric channel, displays marked permeability to calcium ions and is a major component of brain

nicotinic receptors that are blocked by, and highly sensitive to, alpha-bungarotoxin. Once this receptor binds acetylcholine, it undergoes an extensive change in conformation that affects all subunits and leads to opening of an ion-conducting channel across the plasma membrane. This gene is located in a region identified as a major susceptibility locus for juvenile myoclonic epilepsy and a chromosomal location involved in the genetic transmission of schizophrenia. An evolutionarily recent partial duplication event in this region results in a hybrid containing sequence from this gene and a novel FAM7A gene. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

CHRNA7 Antibody (N-term) - References

Chernyavsky, A.I., et al. Am. J. Physiol., Cell Physiol. 299 (5), C903-C911 (2010) :
Saccone, N.L., et al. Genes Brain Behav. 9(7):741-750(2010)
Ruano, G., et al. Pharmacogenomics 11(7):959-971(2010)
Jin, Y., et al. Int. J. Immunogenet. (2010) In press :
Schraufstatter, I.U., et al. J Stem Cells 4(4):203-215(2009)