

CHRNA7 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP13898a**Specification**

CHRNA7 Antibody (N-term) Blocking peptide - Product InformationPrimary Accession [P36544](#)**CHRNA7 Antibody (N-term) Blocking peptide - Additional Information****Gene ID** 1139;89832**Other Names**

Neuronal acetylcholine receptor subunit alpha-7, CHRNA7, NACHRA7

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13898a was selected from the N-term region of CHRNA7. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CHRNA7 Antibody (N-term) Blocking peptide - 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) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

CHRNA7 Antibody (N-term) Blocking peptide - Images

CHRNA7 Antibody (N-term) Blocking peptide - 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 heteropentamers 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) Blocking peptide - 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)