

CHRNA4 antibody - N-terminal region
Rabbit Polyclonal Antibody
Catalog # AI10768**Specification**

CHRNA4 antibody - N-terminal region - Product Information

Application	WB
Primary Accession	P43681
Other Accession	NM_000744 , NP_000735
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Horse, Bovine, Dog
Predicted	Human, Mouse, Rat, Rabbit, Zebrafish, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	67kDa kDa

CHRNA4 antibody - N-terminal region - Additional Information**Gene ID** 1137

Alias Symbol **BFNC, EBN, EBN1, NACRA4, NACHR, NACHRA4**

Other Names

Neuronal acetylcholine receptor subunit alpha-4, CHRNA4, NACRA4

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-CHRNA4 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

CHRNA4 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

CHRNA4 antibody - N-terminal region - Protein Information

Name CHRNA4 ([HGNC:1958](#))

Synonyms NACRA4

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 (PubMed:22361591, PubMed:27698419, PubMed:29720657, PubMed:38454578). CHRNA4 forms heteropentameric neuronal acetylcholine receptors with CHRNB2 and CHRNB4, as well as CHRNA5 and CHRNB3 as accessory subunits. Is the most abundant nAChR subtype expressed in the central nervous system (PubMed:16835356, PubMed:22361591, PubMed:27698419, PubMed:29720657, PubMed:38454578). Found in two major stoichiometric forms, (CHRNA4)₃:(CHRNB2)₂ and (CHRNA4)₂:(CHRNB2)₃, the two stoichiometric forms differ in their unitary conductance, calcium permeability, ACh sensitivity and potentiation by divalent cation (PubMed:27698419, PubMed:29720657, PubMed:38454578). Involved in the modulation of calcium-dependent signaling pathways, influences the release of neurotransmitters, including dopamine, glutamate and GABA (By similarity).

Cellular Location

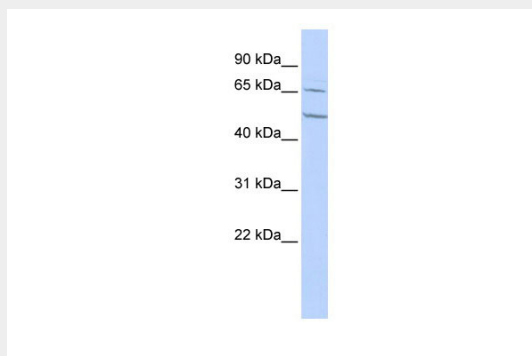
Synaptic cell membrane {ECO:0000250|UniProtKB:O70174}; Multi-pass membrane protein. Cell membrane {ECO:0000250|UniProtKB:O70174}; Multi-pass membrane protein

CHRNA4 antibody - N-terminal region - 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](#)

CHRNA4 antibody - N-terminal region - Images



WB Suggested Anti-CHRNA4 Antibody Titration: 0.2-1 µg/ml

Positive Control: HepG2 cell lysate

CHRNA4 antibody - N-terminal region - References

Fedi,M., (2008) J. Clin. Endocrinol. Metab. 93 (2), 634-637 Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.Publications:Ishizuka, T., Ozawa, A., Goshima, H. & Watanabe, Y. Involvement of nicotinic acetylcholine receptor in the proliferation of mouse induced pluripotent stem cells. Life Sci. 90, 637-48 (2012). WB, Mouse, Guinea pig, Human, Rat, Dog, Zebrafish, Bovine, H, Rabbit22483693