

# CHRNA4 antibody - N-terminal region

Rabbit Polyclonal Antibody

Catalog # AI10768

## Product Information

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Application	WB
Primary Accession	<a href="#">P43681</a>
Other Accession	<a href="#">NM_000744</a> , <a href="#">NP_000735</a>
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Dog, Horse, Bovine
Predicted	Human, Mouse, Rat, Rabbit, Zebrafish, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	69957

## Additional Information

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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.

## Protein Information

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Name	CHRNA4 ( <a href="#">HGNC:1958</a> )
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: <a href="#">22361591</a> , PubMed: <a href="#">27698419</a> , PubMed: <a href="#">29720657</a> , PubMed: <a href="#">38454578</a> ). CHRNA4 forms

heteropentameric neuronal acetylcholine receptors with CHRNA4 and CHRNB4, as well as CHRNB2 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)<sub>3</sub>:(CHRNB2)<sub>2</sub> and (CHRNA4)<sub>2</sub>:(CHRNB2)<sub>3</sub>, 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).

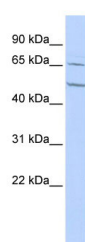
#### Cellular Location

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

## References

Fedi, M., (2008) J. Clin. Endocrinol. Metab. 93 (2), 634-637 Reconstitution and Storage: For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C 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, Rabbit 22483693

## Images



WB Suggested Anti-CHRNA4 Antibody Titration: 0.2-1 µg/ml  
Positive Control: HepG2 cell lysate

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