

**CHRNA4 Antibody (internal region, near the N-Term)**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF2738a****Specification**

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**CHRNA4 Antibody (internal region, near the N-Term) - Product Information**

|                   |                                                    |
|-------------------|----------------------------------------------------|
| Application       | E                                                  |
| Primary Accession | <a href="#">P43681</a>                             |
| Other Accession   | <a href="#">NP_000735.1</a> , <a href="#">1137</a> |
| Predicted         | Human                                              |
| Host              | Goat                                               |
| Clonality         | Polyclonal                                         |
| Concentration     | 0.5 mg/ml                                          |
| Isotype           | IgG                                                |
| Calculated MW     | 69957                                              |

**CHRNA4 Antibody (internal region, near the N-Term) - Additional Information****Gene ID** 1137**Other Names**

Neuronal acetylcholine receptor subunit alpha-4, CHRNA4, NACRA4

**Dilution**

E~~N/A

**Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

CHRNA4 Antibody (internal region, near the N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

**CHRNA4 Antibody (internal region, near the N-Term) - 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:<a href="http://www.uniprot.org/citations/22361591" target="\_blank">22361591</a>, PubMed:<a href="http://www.uniprot.org/citations/27698419" target="\_blank">27698419</a>, PubMed:<a href="http://www.uniprot.org/citations/29720657" target="\_blank">29720657</a>, PubMed:<a href="http://www.uniprot.org/citations/38454578" target="\_blank">38454578</a>). 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:<a href="http://www.uniprot.org/citations/16835356" target="\_blank">16835356</a>, PubMed:<a href="http://www.uniprot.org/citations/22361591" target="\_blank">22361591</a>, PubMed:<a href="http://www.uniprot.org/citations/27698419" target="\_blank">27698419</a>, PubMed:<a href="http://www.uniprot.org/citations/29720657" target="\_blank">29720657</a>, PubMed:<a href="http://www.uniprot.org/citations/38454578" target="\_blank">38454578</a>). 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:<a href="http://www.uniprot.org/citations/27698419" target="\_blank">27698419</a>, PubMed:<a href="http://www.uniprot.org/citations/29720657" target="\_blank">29720657</a>, PubMed:<a href="http://www.uniprot.org/citations/38454578" target="\_blank">38454578</a>). 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 (internal region, near the 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](#)

#### **CHRNA4 Antibody (internal region, near the N-Term) - Images**

#### **CHRNA4 Antibody (internal region, near the N-Term) - References**

How mutations in the nAChRs can cause ADNFLE epilepsy. Bertrand D, Picard F, Le Hellard S, Weiland S, Favre I, Phillips H, Bertrand S, Berkovic SF, Malafosse A, Mulley J. *Epilepsia*. 2002;43 Suppl 5:112-22. PMID: 12121305