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CHRNA2 Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11942a

Specification

CHRNA2 Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	Q15822
Other Accession	NP_000733.2
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**59765**
Antigen Region	**42-69**

CHRNA2 Antibody (N-term) - Additional Information

Gene ID 1135

Other Names
Neuronal acetylcholine receptor subunit alpha-2, CHRNA2

Target/Specificity
This CHRNA2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 42-69 amino acids from the N-terminal region of human CHRNA2.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

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
CHRNA2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CHRNA2 Antibody (N-term) - Protein Information

Name CHRNA2 (HGNC:1956)

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 neurotrasnmitter 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:18723036). CHRNA2 forms heteropentameric neuronal acetylcholine receptors with CHRNB2 and CHRNB4 and plays a role in nicotine dependence (PubMed:24467848, PubMed:27493220).

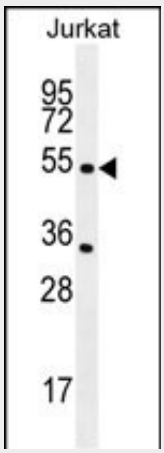
Cellular Location
Synaptic cell membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein

CHRNA2 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 Cytomety
- Cell Culture

CHRNA2 Antibody (N-term) - Images



CHRNA2 Antibody (N-term) (Cat. #AP11942a) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the CHRNA2 antibody detected the CHRNA2 protein (arrow).

CHRNA2 Antibody (N-term) - Background

Nicotinic acetylcholine receptors (nAChRs) are ligand-gated ion channels formed by a pentameric arrangement of alpha and beta subunits to create distinct muscle and neuronal receptors. Neuronal receptors are found throughout the peripheral and central nervous system where they are involved in fast synaptic transmission. This gene encodes an alpha subunit that is widely expressed in the brain. The proposed structure for nAChR subunits

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. Mutations in this gene cause autosomal dominant nocturnal frontal lobe epilepsy type 4. Single nucleotide polymorphisms (SNPs) in this gene have been associated with nicotine dependence.

CHRNA2 Antibody (N-term) - References

Saccone, N.L., et al. Genes Brain Behav. 9(7):741-750(2010)
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Hoda, J.C., et al. FEBS Lett. 583(10):1599-1604(2009)
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