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CHRNA9 antibody - N-terminal region
Rabbit Polyclonal Antibody
Catalog # AI16203

Specification

CHRNA9 antibody - N-terminal region - Product Information

Application	**WB**
Primary Accession	Q9UGM1
Other Accession	NM_017581, NP_060051
Reactivity	**Mouse, Rabbit, Horse, Bovine, Guinea Pig, Dog**
Predicted	**Mouse, Rabbit, Horse, Bovine, Guinea Pig, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**55kDa KDa**

CHRNA9 antibody - N-terminal region - Additional Information

Gene ID 55584

Alias Symbol	**NACHRA9, HSA243342**

Other Names
Neuronal acetylcholine receptor subunit alpha-9, Nicotinic acetylcholine receptor subunit alpha-9, NACHR alpha-9, CHRNA9, NACHRA9

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-CHRNA9 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
CHRNA9 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

CHRNA9 antibody - N-terminal region - Protein Information

Name CHRNA9 (HGNC:14079)

Synonyms NACHRA9

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:11752216, PubMed:18723036, PubMed:25282151). Forms either homopentamers or heteropentamers with CHRNA10. Expressed in the inner ear, in sympathetic neurons and in other non-neuronal cells, such as skin keratinocytes and lymphocytes (PubMed:11752216, PubMed:18723036). nAChR formed by CHRNA9:CHRNA10 mediate central nervous system control of auditory and vestibular sensory processing. The channel is permeable to a range of divalent cations including calcium, the influx of which may activate a potassium current which hyperpolarizes the cell membrane (PubMed:11752216, PubMed:25282151). In the ear, mediates synaptic transmission between efferent olivocochlear fibers and hair cells of the cochlea, this may lead to a reduction in basilar membrane motion, altering the activity of auditory nerve fibers and reducing the range of dynamic hearing. This may protect against acoustic trauma (By similarity). May also regulate keratinocyte adhesion (PubMed:11021840, PubMed:11752216, PubMed:25282151).

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

Tissue Location
Expressed in cochlea, keratinocytes, pituitary gland, B-cells and T-cells.

CHRNA9 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 Cytomety
- Cell Culture

CHRNA9 antibody - N-terminal region - Images

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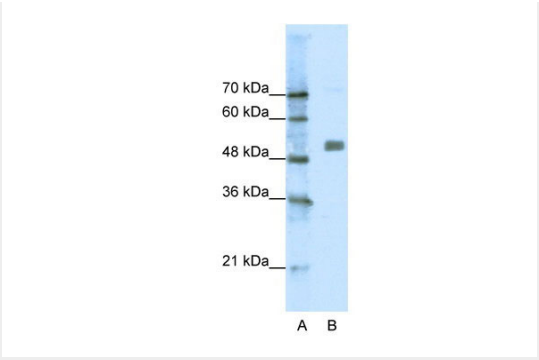

WB Suggested Anti-CHRNA9 Antibody Titration: 0.0625µg/ml
ELISA Titer: 1:312500
Positive Control: Jurkat cell lysate

CHRNA9 antibody - N-terminal region - Background

Ionotropic receptor with a probable role in the modulation of auditory stimuli. Agonist binding induces a conformation change that leads to the opening of an ion-conducting channel across the plasma membrane (PubMed:11752216, PubMed:25282151). The channel is permeable to a range of divalent cations including calcium, the influx of which may activate a potassium current which hyperpolarizes the cell membrane (PubMed:11752216, PubMed:25282151). In the ear, this may lead to a reduction in basilar membrane motion, altering the activity of auditory nerve fibers and reducing the range of dynamic hearing. This may protect against acoustic trauma. May also regulate keratinocyte adhesion (PubMed:11021840).

CHRNA9 antibody - N-terminal region - References

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