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AChRα10 Polyclonal Antibody

Catalog # AP68264

Product Information

Application	WB, E
Primary Accession	Q9GZZ6
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	49705

Additional Information

Gene ID	57053
Other Names	CHRNA10; NACHRA10; Neuronal acetylcholine receptor subunit alpha-10; Nicotinic acetylcholine receptor subunit alpha-10; NACHR alpha-10
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

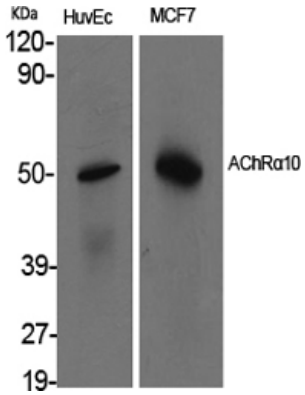
Name	CHRNA10 (HGNC:13800)
Synonyms	NACHRA10
Function	Component of neuronal acetylcholine receptors (nAChRs) that function as pentameric, ligand-gated cation channels with high calcium permeability. nAChRs are excitatory neurotrasnmitter receptors formed by a collection of nAChR subunits. Each nAChR subunit confers differential attributes to channel properties, including activation, deactivation and desensitization kinetics, pH sensitivity, cation permeability, and binding to allosteric modulators (Probable). Forms heteropentamers with CHRNA9. Expressed in the inner ear, in sympathetic neurons and in other non-neuronal cells, such as skin keratinocytes and lymphocytes (PubMed:11752216, PubMed:15531379). nAChR formed by CHRNA9:CHRNA10 is involved in modulation of auditory stimuli. 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. 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 (PubMed:11752216). This may protect against acoustic trauma. May also regulate keratinocyte adhesion (By similarity).
Cellular Location	Synaptic cell membrane {ECO:0000250|UniProtKB:Q9JLB5}; Multi-pass membrane protein. Cell membrane {ECO:0000250|UniProtKB:Q9JLB5}; Multi-pass membrane protein
Tissue Location	Expressed in inner-ear tissue, tonsil, immortalized B-cells, cultured T-cells and peripheral blood lymphocytes

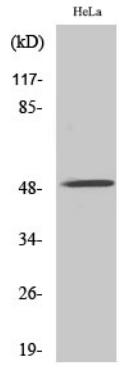
Background

Ionotropic receptor with a probable role in the modulation of auditory stimuli. Agonist binding may induce an extensive change in conformation that affects all subunits and leads to opening of an ion-conducting channel across the plasma membrane. 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. 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.

Images



Western Blot analysis of various cells using AChRα10 Polyclonal Antibody



Western Blot analysis of A549 cells using AChRα10 Polyclonal Antibody

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