

# Nicotinic Acetylcholine Receptor alpha 4 Rabbit mAb

Catalog # AP76616

## Product Information

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Application	WB, IP
Primary Accession	<a href="#">P43681</a>
Reactivity	Human, Mouse, Rat, Hamster
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	69957

## Additional Information

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Gene ID	1137
Other Names	CHRNA4
Dilution	WB~~1/500-1/1000 IP~~1/20
Format	Liquid

## Protein Information

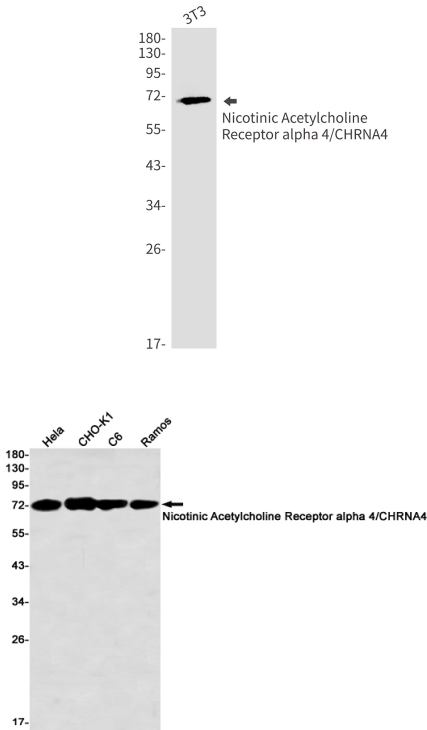
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Name	CHRNA4 ( <a href="#">HGNC:1958</a> )
Synonyms	NACRA4
Function	<p>Component of neuronal acetylcholine receptors (nAChRs) that function as pentameric, ligand-gated cation channels with high calcium permeability among other activities. nAChRs are 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 CHRNA2 and CHRNA4, as well as CHRNA5 and CHRNA3 as accessory subunits. Is the most abundant nAChR subtype expressed in the central nervous system (PubMed:<a href="#">16835356</a>, PubMed:<a href="#">22361591</a>, PubMed:<a href="#">27698419</a>, PubMed:<a href="#">29720657</a>, PubMed:<a href="#">38454578</a>). Found in two major stoichiometric forms,(CHRNA4)<sub>3</sub>:(CHRNA2)<sub>2</sub> and (CHRNA4)<sub>2</sub>:(CHRNA2)<sub>3</sub>, the two stoichiometric forms differ in their unitary conductance, calcium permeability, ACh sensitivity and potentiation by divalent cation (PubMed:<a href="#">27698419</a>, PubMed:<a href="#">29720657</a>, PubMed:<a href="#">38454578</a>). Involved in the modulation of calcium-dependent signaling pathways, influences the release of neurotransmitters, including dopamine, glutamate and GABA (By similarity).</p>

Cellular Location

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

Images



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