## CHRNA7 Rabbit Polyclonal Antibody

Catalog No: #29299

Package Size: #29299-1 50ul #29299-2 100ul



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## Description

Product Name	CHRNA7 Rabbit Polyclonal Antibody
Host Species	Rabbit
Clonality	Polyclonal
Isotype	lgG
Purification	Affinity purification
Applications	WB,IHC,IF
Species Reactivity	Human,Mouse,Rat
Immunogen Description	Recombinant fusion protein of human CHRNA7 (NP_001177384.1).
Other Names	CHRNA7;CHRNA7-2;NACHRA7
Accession No.	Swiss Prot:P36544GeneID:1139
Calculated MW	11kDa/56kDa/59kDa
SDS-PAGE MW	53kDa
Formulation	Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.
Storage	Store at -20°C. Avoid freeze / thaw cycles.

Application Details	
WB 1:500 - 1:2000	
IHC 1:50 - 1:200	
IF 1:50 - 1:200	

## Images



Immunohistochemistry of paraffin-embedded rat brain using CHRNA7 at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded mouse brain using CHRNA7 at dilution of 1:100 (40x lens).



Western blot analysis of extracts of various cell lines, using CHRNA7 at 1:1000 dilution.



Immunofluorescence analysis of L929 cells using CHRNA7 antibody at dilution of 1:100. Blue: DAPI for nuclear staining.

## Background

The nicotinic acetylcholine receptors (nAChRs) are members of a superfamily of ligand-gated ion channels that mediate fast signal transmission at synapses. The nAChRs are thought to be hetero-pentamers composed of homologous subunits. The proposed structure for each subunit 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. The protein encoded by this gene forms a homo-oligomeric channel, displays marked permeability to calcium ions and is a major component of brain nicotinic receptors that are blocked by, and highly sensitive to, alpha-bungarotoxin. Once this receptor binds acetylcholine, it undergoes an extensive change in conformation that affects all subunits and leads to opening of an ion-conducting channel across the plasma membrane. This gene is located in a region identified as a major susceptibility locus for juvenile myoclonic epilepsy and a chromosomal location involved in the genetic transmission of schizophrenia. An evolutionarily recent partial duplication event in this region results in a hybrid containing sequence from this gene and a novel FAM7A gene. Alternative splicing results in multiple transcript variants.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.