

## Product datasheet for **TA374776**

### Nicotinic Acetylcholine Receptor alpha 7 (CHRNA7) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	ICC/IF, IHC, WB
Recommended Dilution:	WB,1:500 - 1:2000 IHC,1:50 - 1:200 IF,1:50 - 1:200
Reactivity:	Human, Mouse, Rat
Modifications:	Unmodified
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 23-230 of human CHRNA7 (NP_001177384.1).
Formulation:	Buffer: PBS with 0.02% sodium azide,50% glycerol,pH7.3.
Concentration:	lot specific
Purification:	Affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C. Avoid freeze / thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	11kDa/56kDa/59kDa
Gene Name:	cholinergic receptor nicotinic alpha 7 subunit
Database Link:	<a href="#">Entrez Gene 1139 Human P36544</a>



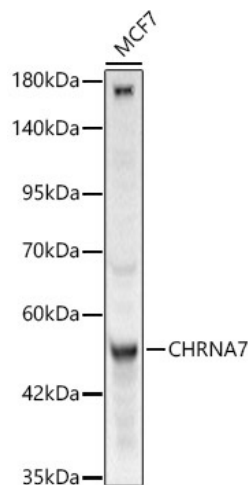
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**Background:**

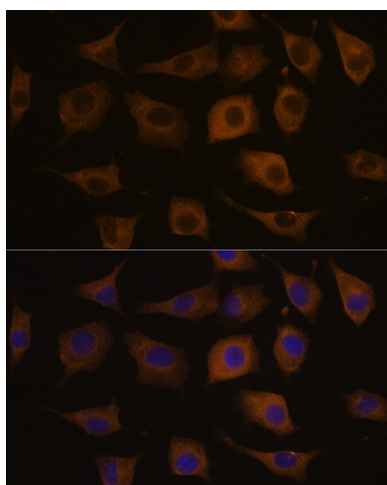
The nicotinic acetylcholine receptors (nAChRs) are members of a superfamily of ligand-gated ion channels that mediate fast signal transmission at synapses. The nAChRs are thought to be hetero-pentamers composed of homologous subunits. The proposed structure for each subunit is a conserved N-terminal 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.

**Synonyms:**

CHRNA7-2; NACHRA7

**Product images:**

Western blot analysis of lysates from MCF7 cells using CHRNA7 Rabbit pAb(TA374776) at 1:2000 dilution. | Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) at 1:10000 dilution. | Lysates/proteins: 25 µg per lane. | Blocking buffer: 3% nonfat dry milk in TBST. | Detection: ECL Basic Kit. | Exposure time: 120s.



Immunofluorescence analysis of L929 cells using CHRNA7 antibody (TA374776) at dilution of 1:100. Blue: DAPI for nuclear staining.