

## Product datasheet for **TA338736**

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

#### Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for anti-CHRNA7 antibody: synthetic peptide directed towards the middle region of human CHRNA7. Synthetic peptide located within the following region: VPTPDSGVVCGRMACSPTHDEHLLHGGQPPEGDPDLAKILEEVRYIANRF
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. <i>Note that this product is shipped as lyophilized powder to China customers.</i>
Concentration:	lot specific
Purification:	Protein A purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	56 kDa
Gene Name:	cholinergic receptor nicotinic alpha 7 subunit
Database Link:	<a href="#">NP_000737</a> <a href="#">Entrez Gene 1139 Human</a> <a href="#">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. [provided by RefSeq, Feb 2012]

**Synonyms:**

CHRNA7-2; NACHRA7

**Note:**

Immunogen Sequence Homology: Pig: 100%; Horse: 100%; Human: 100%; Bovine: 100%; Rabbit: 100%; Guinea pig: 100%; Rat: 93%; Dog: 92%; Mouse: 92%

**Protein Families:**

Druggable Genome, Ion Channels: Cys-loop Receptors, Transmembrane

**Protein Pathways:**

Calcium signaling pathway

**Product images:**


WB Suggested Anti-CHRNA7 Antibody Titration: 1.25 ug/ml; ELISA Titer: 1:62500; Positive Control: Jurkat cell lysate CHRNA7 is supported by BioGPS gene expression data to be expressed in Jurkat