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Product datasheet for TA330424

Nicotinic Acetylcholine Receptor alpha 7 (CHRNA7) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB
Reactivity:	Human, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for anti-CHRNA7 antibody: synthetic peptide directed towards the N terminal of human CHRNA7. Synthetic peptide located within the following region: QGEFQRKLYKELVKNYNPLERPVANDSQPLTVYFSLSLLQIMDVDEKNQV
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. *Note that this product is shipped as lyophilized powder to China customers.*
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:	NP_000737 Entrez Gene 25302 RatEntrez Gene 1139 Human P36544

View online »

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. CHRNA7 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 CHRNA7 and a novel FAM7A gene.

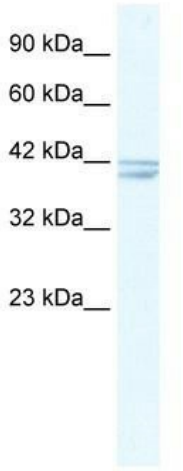
Synonyms: CHRNA7-2; NACHRA7

Note: Immunogen sequence homology: Human: 100%; Mouse: 100%; Rat: 100%; Bovine: 93%; Chicken: 93%

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

Protein Pathways: Calcium signaling pathway

Product images:



WB Suggested Anti-CHRNA7 Antibody Titration: 2.5 ug/ml; Positive Control: HepG2 cell lysate