

Product datasheet for **TA32886**

Chrnbl Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB: 1:200-1:2000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)EKDEEMSTKVYLD, corresponding to amino acid residues 68-80 of rat nAChR α 1. Extracellular, N-terminus.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.05% Na ₃ N.
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	cholinergic receptor nicotinic beta 1 subunit
Database Link:	NP_036660 Entrez Gene 1140 Human Entrez Gene 11443 Mouse Entrez Gene 24261 Rat P25109



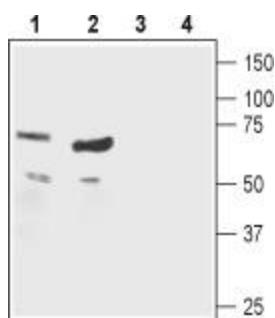
[View online »](#)

Background:

Neuronal nicotinic acetylcholine receptors (nAChRs) belong to the superfamily of ligand-gated ion channels and are widely expressed throughout the central and peripheral nervous systems. nAChRs play crucial roles in modulating a wide range of higher cognitive functions by mediating presynaptic, postsynaptic, and extrasynaptic signaling. nAChRs are formed by the assembly of five transmembrane subunits, selected from a pool of 17 homologous polypeptides ($\alpha 1$ -10, $\beta 1$ -4, γ , δ , and ϵ). There are many nAChR subtypes, each consisting of a specific combination of subunits, which mediate diverse physiological functions. They are widely expressed in the central nervous system, while, in the periphery, they mediate synaptic transmission at the neuromuscular junction and ganglia. nAChRs are also found in non-neuronal/non-muscle cells (keratinocytes, epithelia, macrophages, etc.). Structurally, all subunits have the following: a conserved large extracellular N-terminal domain, 3 conserved transmembrane domains, a variable cytoplasmic loop and a fourth transmembrane domain with a short extracellular C-terminal domain. An active nAChR is generally a heteropentamer of these various subunits organized around a central pore. While most β subunits are neuronal, the $\beta 1$ subunit forms functional receptors along with other subunits in the muscle. $\beta 1$ subunit seems to be involved in myasthenia gravis (MG), an acquired autoimmune disease usually characterized by the presence of circulating autoantibodies that bind to and destroy muscle nAChRs.

Synonyms:

ACHRB; CHRN1; CMS1D; CMS2A; FLJ57107; SCCMS

Product images:


Western blot analysis of mouse (lanes 1 and 3) and rat (lanes 2 and 4) heart lysates: 1-2. Anti-Nicotinic Acetylcholine Receptor $\beta 1$ (extracellular) antibody, (1:500). 3-4. Anti-Nicotinic Acetylcholine Receptor $\beta 1$ (extracellular) antibody, preincubated with the control peptide antigen