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Product datasheet for TA328888

Chrnb4 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide CYEGVNILRIPAKR, corresponding to amino acid residues 95-108 of rat nAChRb4 . 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, 0.025% NaN3.
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 4 subunit
Database Link:	NP_434693 Entrez Gene 1143 HumanEntrez Gene 108015 MouseEntrez Gene 25103 Rat P12392

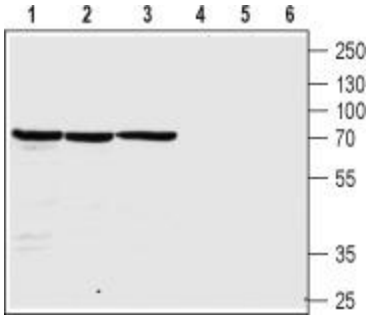
View online »

Background: Acetylcholine, released by cholinergic neurons, activates two groups of acetylcholine receptors (AChRs); muscarinic AChRs (mAChRs) which belong to the superfamily of G-protein coupled receptors (GPCRs) and nicotinic AChRs (nAChRs) which belong to the ligand-gated ion channel superfamily. nAChRs also respond to nicotine, hence their name.To date, 17 different but related subunits of nAChRs have been identified and cloned. They consist of a subunits (a1-10), which are responsible for the binding of ligands. In fact, this subunit includes a Cys-loop in the first extracellular domain that is required for agonist binding. The other subunits responsible for making up the active receptor are the Ã? (Ã?1-4), ?, d and e subunits3. 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 Ã? subunits are neuronal, the Ã?1 subunit forms functional receptors along with other subunits in the muscle. In neurons the a2-a6 and Ã?2-Ã?4 subunits form heteropentameric receptors, usually with a (ax)2(Ã?y)3 stoichiometry.

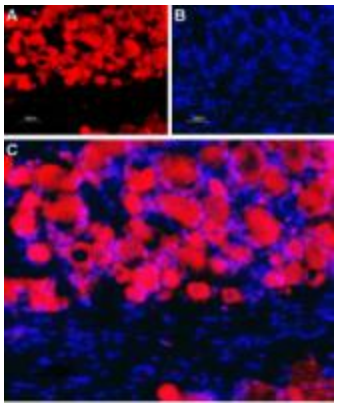
Synonyms: CHRNB4

Note: This antibody was tested in live cell imaging. Please see IF/ICC data for detail.

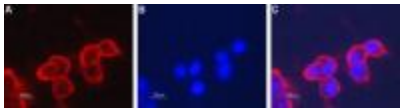
Product images:



Western blot analysis of SH-SY5Y human neuroblastoma cell lysate (lanes 1 and 4), rat dorsal root ganglion (lanes 2 and 5) and mouse brain (lanes 3 and 6) lysates: 1-3. Anti-Nicotinic Acetylcholine Receptor β4 (extracellular) antibody, (1:200). 4-6. Anti-Nicotinic Acetylcholine Receptor β4 (extracellular) antibody, preincubated with the control peptide antigen.



Expression of Nicotinic Acetylcholine Receptor β4 in rat dorsal root ganglion (DRG) Immunohistochemical staining of rat dorsal root ganglion (DRG) frozen sections using Anti-Nicotinic Acetylcholine Receptor β4 (extracellular) antibody. A. AChRβ4 labeling (red) appears in neuronal cell bodies. B. Nuclear staining using DAPI as counter stain (blue). C. Merged images of A+B.



Expression of Nicotinic Acetylcholine Receptor β4 in rat PC12 cells. Immunocytochemical staining of live intact rat pheochromocytoma PC12 cells. A. Cells were stained with Anti-Nicotinic Acetylcholine Receptor β4 (extracellular) antibody, (1:100), followed by goat anti-rabbit-AlexaFluor-594 secondary antibody (red). B. Cell nuclei were visualized using Hoechst 33342 (blue). C. Merge of the two images.