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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:	<u>NP 434693</u> Entrez Gene 1143 HumanEntrez Gene 108015 MouseEntrez Gene 25103 Rat P12392



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GRIGENE Chrnb4 Rabbit Polyclonal Antibody – TA328888

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 Cysloop in the first extracellular domain that is required for agonist binding. The other subunits responsible for making up the active receptor are the \tilde{A} ? (\tilde{A} ?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 β 4 (extracellular) antibody, (1:200). 4-6. Anti-Nicotinic Acetylcholine Receptor β 4 (extracellular) antibody, preincubated with the control peptide antigen.



Expression of Nicotinic Acetylcholine Receptor β 4 in rat dorsal root ganglion (DRG) Immunohistochemical staining of rat dorsal root ganglion (DRG) frozen sections using Anti-Nicotinic Acetylcholine Receptor β 4 (extracellular) antibody. A. AChR β 4 labeling (red) appears in neuronal cell bodies. B. Nuclear staining using DAPI as counter stain (blue). C. Merged images of A+B.

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Expression of Nicotinic Acetylcholine Receptor β 4 in rat PC12 cells. Immunocytochemical staining of live intact rat pheochromocytoma PC12 cells. A. Cells were stained with Anti-Nicotinic Acetylcholine Receptor β 4 (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.

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