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PRODUCT DATASHEET

Anti-Nicotinic Acetylcholine Receptor (nAChR) β4 Antibody

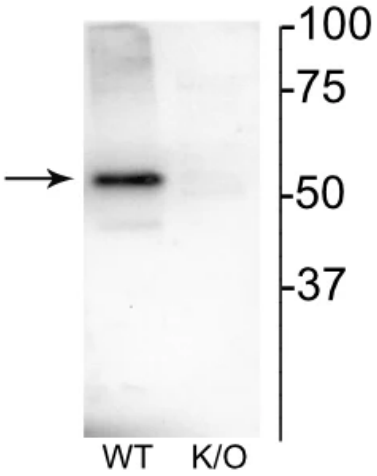
phosphosolutions ANTIBODIES THAT WORK Pooled Serum

Product Details

Available Variants	100 µL (SKU:1471-nACB4) 25 µL (SKU:1471-nACB4t)
Conjugate	Unconjugated
Isotype	IgG
Gene Name	Chrnb4
Host Species	Rabbit
Format	Antigen Affinity Purified from Pooled Serum
Physical State	Liquid
Buffer	10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per ml BSA and 50% glycerol.
Production Notes	Prepared from pooled rabbit serum by affinity purification using a column to which the fusion protein antigen was coupled.
Applications	ELISA, WB
Dilution Ranges	WB: 1:1000 WB Brain: 1:1000
Species Reactivity	Mouse, Rat
Immunogen	Fusion protein from the cytoplasmic loop of the β4 subunit of mouse nAChR.
Specificity	Specific for endogenous levels of the ~52 kDa nAChRβ4 protein.
Molecular Weight	52 kDa
Quality Control	Western blots performed on each lot.
Storage	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.

Antibody Registry ID	AB_2619714
UniProt ID	Q8R493 UniProt Summary: Component of neuronal acetylcholine receptors (nAChRs) that function as pentameric, ligand-gated cation channels with high calcium permeability among other activities. nAChRs are excitatory neurotrasnmitter receptors formed by a collection of nAChR subunits known to mediate synaptic transmission in the nervous system and the neuromuscular junction. Each nAchR subunit confers differential attributes to channel properties, including activation, deactivation and desensitization kinetics, pH sensitivity, cation permeability, and binding to allosteric modulators (PubMed:20881005, PubMed:31488329, PubMed:8663494, PubMed:8906617, PubMed:9203638). CHRNB4 forms heteropentameric neuronal acetylcholine receptors with CHRNA2, CHRNA3 and CHRNA4, as well as CHRNA5 and CHRNB3 as accesory subunits (PubMed:11118490, PubMed:20881005, PubMed:8663494). CHRNA3:CHRNB4 being predominant in neurons of the autonomic ganglia, it is known as ganglionic nicotinic receptor (PubMed:31488329). CHRNA3:CHRNB4 or CHRNA3:CHRNA5:CHRNB4 play also an important role in the habenulo-interpeduncular tract, modulating the mesolimbic dopamine system and affecting reward circuits and addiction (By similarity). Hypothalamic CHRNA3:CHRNB4 nAChR activation by nicotine leads to activation of POMC neurons and a decrease in food intake (By similarity). {ECO:0000250|UniProtKB:P12392, ECO:0000250|UniProtKB:Q8R493, ECO:0000269|PubMed:11118490, ECO:0000269|PubMed:20881005, ECO:0000269|PubMed:31488329, ECO:0000269|PubMed:8663494, ECO:0000269|PubMed:8906617, ECO:0000269|PubMed:9203638}.
Shipping	Blue Ice
Expiration	After date of receipt, stable for at least 1 year at -20°C.
Usage Statement	For research use only. Not intended for therapeutic or diagnostic use. Use of all products is subject to our terms and conditions, which can be viewed on our website.
NCBI Gene ID	108015

Product Images



Western blot of mouse habenula lysate showing specific immunolabeling of the ~52 kDa nAChRβ4 protein.