

Anti-Nicotinic Acetylcholine Receptor (nAChR) β 4 Antibody
Our Anti-Nicotinic Acetylcholine Receptor (nAChR) β 4 primary antibody from
PhosphoSolutions is rabbit
Catalog # AN1473

Specification

Anti-Nicotinic Acetylcholine Receptor (nAChR) β 4 Antibody - Product Information

Primary Accession	Q8R493
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	55809

Anti-Nicotinic Acetylcholine Receptor (nAChR) β 4 Antibody - Additional Information

Gene ID **108015**

Other Names

acetylcholine receptor nicotinic beta 4 (neuronal) antibody, ACHB4_HUMAN antibody, AChR antibody, Cholinergic receptor nicotinic beta 4 antibody, Cholinergic receptor nicotinic beta polypeptide 4 antibody, cholinergic receptor nicotinic beta polypeptide 4 antibody, Chrn β 4 antibody, Neuronal acetylcholine receptor subunit beta-4 antibody, Neuronal nicotinic receptor beta 4 subunit antibody

Target/Specificity

Nicotinic acetylcholine receptors (nAChRs) are ionotropic, cholinergic receptors that are divided into 2 types; muscle type and neuronal type. Neuronal nAChRs are pentameric ion channels consisting of 5 identical (homopentamers) or different (heteropentamers) subunits. Heteropentameric neuronal nAChRs mediate fast synaptic transmission in the autonomic nervous system. The predominant hetero-oligomeric nAChR in the CNS contain the subunits α 4 β 2, whereas α 3 β 4 prevail in the PNS. However, the expression of these subunits varies not only by region but also during development (Scholze et al 2011). In the brain, β 2-containing receptors greatly outnumber receptors that contain β 4 (McGehee & Role, 1995; Albuquerque, et al., 2009), and in most brain regions, targeted deletion of the β 2 subunit virtually abolishes [³H]-epibatidine binding and receptor autoradiography (Zoli, et al., 1998) due to the absence of a β subunit required to form functional nAChRs (Champtiaux & Changeux, 2004).

Format

Antigen Affinity Purified from Pooled Serum

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Anti-Nicotinic Acetylcholine Receptor (nAChR) β 4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

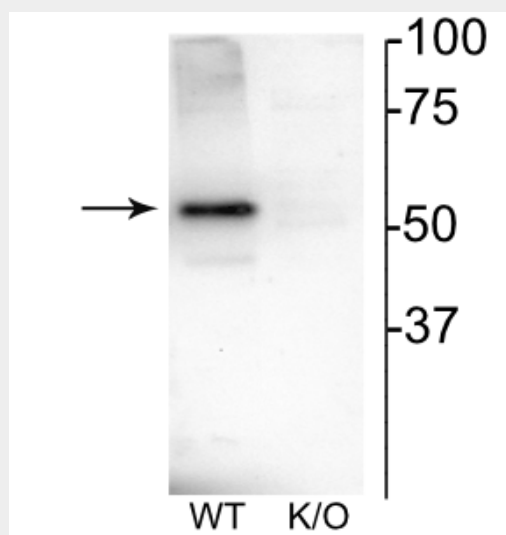
Blue Ice

Anti-Nicotinic Acetylcholine Receptor (nAChR) $\beta 4$ Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Nicotinic Acetylcholine Receptor (nAChR) $\beta 4$ Antibody - Images



Western blot of mouse habenula lysate showing specific immunolabeling of the ~52 kDa nAChR $\beta 4$ protein.

Anti-Nicotinic Acetylcholine Receptor (nAChR) $\beta 4$ Antibody - Background

Nicotinic acetylcholine receptors (nAChRs) are ionotropic, cholinergic receptors that are divided into 2 types; muscle type and neuronal type. Neuronal nAChRs are pentameric ion channels consisting of 5 identical (homopentamers) or different (heteropentamers) subunits. Heteropentameric neuronal nAChRs mediate fast synaptic transmission in the autonomic nervous system. The predominant hetero-oligomeric nAChR in the CNS contain the subunits $\alpha 4\beta 2$, whereas $\alpha 3\beta 4$ prevail in the PNS. However, the expression of these subunits varies not only by region but also during development (Scholze et al 2011). In the brain, $\beta 2$ -containing receptors greatly outnumber receptors that contain $\beta 4$ (McGehee & Role, 1995; Albuquerque, et al., 2009), and in most brain regions, targeted deletion of the $\beta 2$ subunit virtually abolishes [3H]-epibatidine binding and receptor autoradiography (Zoli, et al., 1998) due to the absence of a β subunit required to form functional nAChRs (Champtiaux & Changeux, 2004).