

## Anti-Nicotinic Acetylcholine Receptor (nAChR) β2 Antibody

Our Anti-Nicotinic Acetylcholine Receptor (nAChR) β2 primary antibody from PhosphoSolutions is rabbi Catalog # AN1472

## **Product Information**

Application	WB
Primary Accession	<u>Q9ERK7</u>
Host	Rabbit
Clonality	Polyclonal
lsotype	IgG
Calculated MW	57113

## **Additional Information**

Gene ID Other Names	11444 Acetylcholine receptor beta 2 neural antibody, ACHB2_HUMAN antibody, ACHN antibody, AChR antibody, Acrb 2 antibody, Acrb2 antibody, b2 nAchR antibody, Cholinergic receptor nicotinic beta 2 antibody, Cholinergic receptor nicotinic beta polypeptide 2 antibody, Cholinergic receptor nicotinic beta polypeptide 2 neuronal antibody, cholinergic receptor nicotinic beta 2 (neuronal) antibody, Chrnb2 antibody, EFNL 3 antibody, EFNL3 antibody, nAChRB2 antibody, Neuronal acetylcholine receptor protein beta 2 chain precursor antibody, Neuronal acetylcholine receptor protein subunit beta 2 antibody, Neuronal acetylcholine receptor subunit beta-2 antibody, Neuronal nicotinic acetylcholine receptor beta 2 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 $\alpha 4\beta 2$ , 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 $\beta$ subunit required to form functional nAChRs (Champtiaux & Changeux, 2004).
Dilution	WB~~1:1000
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) $\beta$ 2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

## 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  $\alpha4\beta2$ , whereas  $\alpha3\beta4$  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,  $\beta2$ -containing receptors greatly outnumber receptors that contain  $\beta4$  (McGehee & Role, 1995; Albuquerque, et al., 2009), and in most brain regions, targeted deletion of the  $\beta2$  subunit virtually abolishes [3H]-epibatidine binding and receptor autoradiography (Zoli, et al., 1998) due to the absence of a  $\beta$  subunit required to form functional nAChRs (Champtiaux & Changeux, 2004).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.