10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Nicotinic Acetylcholine Receptor (nAChR) β4 Antibody

Our Anti-Nicotinic Acetylcholine Receptor (nAChR) β4 primary antibody from PhosphoSolutions is rabbi
Catalog # AN1473

Product Information

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

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, Chrnb4 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 α4β2, whereas α3β4 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, β2-containing receptors greatly outnumber receptors that contain β4 (McGehee & Role, 1995; Albuquerque, et al., 2009), and in most brain regions, targeted deletion of the β2 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).
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) β4 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 α4β2, whereas α3β4 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, β2-containing receptors greatly outnumber receptors that contain β4 (McGehee & Role, 1995; Albuquerque, et al., 2009), and in most brain regions, targeted deletion of the β2 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).