

Goat Anti-CHRNA4 (aa29-43) Antibody
Peptide-affinity purified goat antibody
Catalog # AF1239a

Specification

Goat Anti-CHRNA4 (aa29-43) Antibody - Product Information

Application	WB
Primary Accession	P43681
Other Accession	NP_000735 , 1137 , 11438 (mouse) , 25590 (rat)
Reactivity	Human, Rat
Predicted	Mouse, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	69957

Goat Anti-CHRNA4 (aa29-43) Antibody - Additional Information

Gene ID 1137

Other Names

Neuronal acetylcholine receptor subunit alpha-4, CHRNA4, NACRA4

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

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

Goat Anti-CHRNA4 (aa29-43) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-CHRNA4 (aa29-43) Antibody - Protein Information

Name CHRNA4

Synonyms NACRA4

Function

After binding acetylcholine, the AChR responds by an extensive change in conformation that affects all subunits and leads to opening of an ion-conducting channel across the plasma membrane permeable to sodium ions.

Cellular Location

Postsynaptic cell membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Cell membrane; Lipid-anchor

Goat Anti-CHRNA4 (aa29-43) 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](#)

Goat Anti-CHRNA4 (aa29-43) Antibody - Images



AF1239a (0.3 µg/ml) staining of Rat Brain lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-CHRNA4 (aa29-43) Antibody - Background

This gene encodes a nicotinic acetylcholine receptor, which belongs to a superfamily of ligand-gated ion channels that play a role in fast signal transmission at synapses. These pentameric receptors can bind acetylcholine, which causes an extensive change in conformation that leads to the opening of an ion-conducting channel across the plasma membrane. This protein is an integral membrane receptor subunit that can interact with either nAChR beta-2 or nAChR beta-4 to form a functional receptor. Mutations in this gene cause nocturnal frontal lobe epilepsy type 1. Polymorphisms in this gene that provide protection against nicotine addiction have been described.

Goat Anti-CHRNA4 (aa29-43) Antibody - References

Resequencing of Nicotinic Acetylcholine Receptor Genes and Association of Common and Rare Variants with the Fagerstr m Test for Nicotine Dependence. Wessel J, et al. *Neuropsychopharmacology*, 2010 Aug 25. PMID 20736995.
Maternal genes and facial clefts in offspring: a comprehensive search for genetic associations in two population-based cleft studies from Scandinavia. Jugessur A, et al. *PLoS One*, 2010 Jul 9. PMID 20634891.
Multiple cholinergic nicotinic receptor genes affect nicotine dependence risk in African and European Americans. Saccone NL, et al. *Genes Brain Behav*, 2010 Jun 22. PMID 20584212.

Genetic variation of CHRNA4 does not modulate attention in Parkinson's disease. Hudson G, et al. *Neurosci Lett*, 2010 Jul 26. PMID 20493238.

Epistasis between APOE and nicotinic receptor gene CHRNA4 in age related cognitive function and decline. Reinvang I, et al. *J Int Neuropsychol Soc*, 2010 May. PMID 20331911.