

## Rabbit Anti-CHRNA4 antibody

## SL1038R

Product Name:	CHRNA4
Chinese Name:	烟碱型乙酰胆碱受体α4抗体
Alias:	Cholinergic receptor nicotinic alpha 4; Cholinergic receptor nicotinic alpha polypeptide 4; Cholinergic receptor nicotinic alpha polypeptide 4; cholinergic receptor, nicotinic, alpha 4; cholinergic receptor, nicotinic, alpha 4 subunit precursor; ACRA4; ALPHA-4NACHR; ALPHA4 ACHR; BFNC; CHRNA4; CHRNA 4; EBN 1; EBN; EBN1; ENFL1; FLJ95812; NACHR; nAChR alpha-4; NACHRA4; NACRA4; NARAC; Nicotinic Acetylcholine Receptor alpha 4; A4 nicotinic receptor; Acetylcholine receptor alpha 4 neural; Acetylcholine receptor neuronal nicotinic alpha 4 subunit; ACH 4; ACH4; Acra 4; Acra4; Alpha4 nAChR; BFNC; Cholinergic receptor nicotinic alpha polypeptide 4; ACHA4_HUMAN; NACRA 4; NACRA4; Neuronal acetylcholine receptor subunit alpha-4; Neuronal nicotinic acetylcholine receptor alpha 4 subunit.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	67kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CHRNA4:531-627/627 <cytoplasmic></cytoplasmic>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized

	antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
	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 type1. Polymorphisms in this gene that provide protection against nicotine addiction have been described.
	Eventions
	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.
	Subunit:  Neuronal AChR is composed of two different types of subunits: alpha and beta. Alpha-4 subunit can be combined to beta-2 or beta-4 to give rise to functional receptors, complexes with beta-2 may be heteropentamers. Interacts with RIC3; which is required for proper folding and assembly.
Product Detail:	Subcellular Location: Cell junction, synapse, postsynaptic cell membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Cell membrane; Lipid-anchor (By similarity).
	DISEASE: Epilepsy, nocturnal frontal lobe, 1 (ENFL1) [MIM:600513]: An autosomal dominant focal epilepsy characterized by nocturnal seizures with hyperkinetic automatisms and poorly organized stereotyped movements. Note=The disease is caused by mutations affecting the gene represented in this entry.
	Similarity: Belongs to the ligand-gated ion channel (TC 1.A.9) family. Acetylcholine receptor (TC 1.A.9.1) subfamily. Alpha-4/CHRNA4 sub-subfamily.
	SWISS: P43681
	Gene ID: 1137

Database links:

Entrez Gene: 1137Human

Entrez Gene: 11438 Mouse

Entrez Gene: 25590Rat

Omim: 118504Human

SwissProt: P43681Human

SwissProt: O70174Mouse

SwissProt: P09483Rat

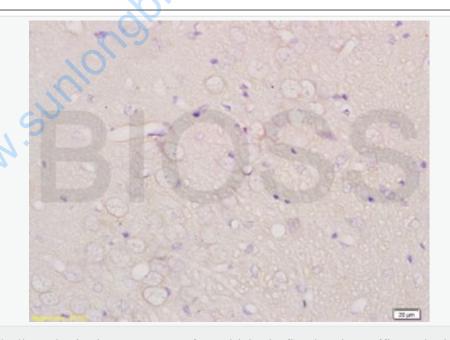
Unigene: 10734Human

Unigene: 252369 Mouse

Unigene: 9697Rat

## **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



## Picture:

Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer

(normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-CHRNA4 Polyclonal Antibody, Unconjugated(SL1038R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

