

Rabbit Anti-CHRNA2(neuronal) antibody

SL2538R

Product Name:	CHRNA2(neuronal)
Chinese Name:	烟碱型乙酰胆碱受体A2(神经型)抗体
Alias:	Nicotinic Acetylcholine Receptor alpha 2; Nicotinic-Acetylcholine receptor; Chrna2; ACHR; CHRNA2; neuronal acetylcholine receptor subunit alpha-2 precursor; Acra-2; Acra2; BC011490; MGC18795; ACHA2_HUMAN; Cholinergic receptor nicotinic alpha 2; Neuronal acetylcholine receptor protein subunit alpha 2; Neuronal acetylcholine receptor subunit alpha-2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Rabbit,
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:	57kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CHRNA2:151-250/529
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:	PubMed
Product Detail:	Nicotinic acetylcholine receptors (nAChRs) are ligand-gated ion channels formed by a pentameric arrangement of alpha and beta subunits to create distinct muscle and neuronal receptors. Neuronal receptors are found throughout the peripheral and central

nervous system where they are involved in fast synaptic transmission. This gene encodes an alpha subunit that is widely expressed in the brain. The proposed structure for nAChR subunits is a conserved N-terminal extracellular domain followed by three conserved transmembrane domains, a variable cytoplasmic loop, a fourth conserved transmembrane domain, and a short C-terminal extracellular region. Mutations in this gene cause autosomal dominant nocturnal frontal lobe epilepsy type 4. Single nucleotide polymorphisms (SNPs) in this gene have been associated with nicotine dependence. [provided by RefSeq].

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.

Subunit:

Neuronal AChR seems to be composed of two different types of subunits: alpha and non-alpha (beta). Alpha-2 subunit can be combined to beta-2 or beta-4 to give rise to functional receptors.

Subcellular Location:

Cell junction, synapse, postsynaptic cell membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein.

DISEASE:

Epilepsy, nocturnal frontal lobe, 4 (ENFL4) [MIM:610353]: An autosomal dominant focal epilepsy characterized by nocturnal seizures associated with fear sensation, tongue movements, and nocturnal wandering, closely resembling nightmares and sleep walking. 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-2/CHRNA2 sub-subfamily.

SWISS:

Q15822

Gene ID: 1135

Database links:

Entrez Gene: 1135Human

Omim: 118502Human

SwissProt: Q15822Human

	Unigene: 57718Human
	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-CHRNA2(neuronal) Polyclonal Antibody,
	Unconjugated(SL2538R) 1:200, overnight at 4°C, followed by conjugation to the
	secondary antibody(SP-0023) and DAB(C-0010) staining