

Rabbit Anti-CHRNA2 (neuronal)/AF350 Conjugated antibody

SL2538R-AF350

Product Name	Anti-CHRNA2(neuronal)/AF350
Chinese Name	AF350 标记的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.
Research Area	Cell biology immunology Neurobiology Channel protein The cell membrane 受体
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Rat(predicted:Human,Mouse,Dog,Rabbit)
Applications	IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	57kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human CHRNA2
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% 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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	background: 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.

Database links:

[Entrez Gene: 1135](#) Human

[Omin: 118502](#) Human

[SwissProt: Q5IS52](#) Chimpanzee



[SwissProt: Q15822](#) Human

[Unigene: 57718](#) Human

Important Note:

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