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CHRNA5 Antibody

Rabbit mAb
Catalog # AP92420

Product Information

Application	WB, FC, IP
Primary Accession	P30532
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	AChR; CHRNA5; LNCR2; NACHRA5;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	53054

Additional Information

Dilution	WB 1:500~1:2000 IP 1:50 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human CHRNA5
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

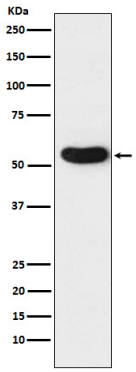
Name	CHRNA5 (HGNC:1959)
Synonyms	NACHRA5
Function	Component of neuronal acetylcholine receptors (nAChRs) that function as pentameric, ligand-gated cation channels with high calcium permeability among other activities. nAChRs are excitatory neurotrasnmitter receptors formed by a collection of nAChR subunits known to mediate synaptic transmission in the nervous system and the neuromuscular junction. Each nAchR subunit confers differential attributes to channel properties, including activation, deactivation and desensitization kinetics, pH sensitivity, cation permeability, and binding to allosteric modulators (PubMed:20881005, PubMed:8663494). Has an accessory rather than functional role and is only able to form functional nAChRs when co-assembled with another beta subunit (PubMed:20881005, PubMed:8663494). Participates in pentameric assemblies along with CHRNA3, CHRNA4, CHRNB2 and CHRNB4 (PubMed:20881005, PubMed:8663494). Increases receptor sensitivity to acetylcholine and nicotine when associated with CHRNA4 and CHRNB2

(PubMed:8663494). Plays a role in nicotine addiction (PubMed:20881005).

Cellular Location

Synaptic cell membrane {ECO:0000250|UniProtKB:P32297}; Multi-pass membrane protein. Cell membrane {ECO:0000250|UniProtKB:P32297}; Multi-pass membrane protein

Images



Western blot analysis of CHRNA5 expression in A431 cell lysate.