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CHRNA5 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP14006c

Specification

CHRNA5 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	P30532
Other Accession	Q8SPU7, NP_000736.2
Reactivity	**Human, Mouse**
Predicted	**Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**53054**
Antigen Region	**187-216**

CHRNA5 Antibody (Center) - Additional Information

Gene ID 1138

Other Names
Neuronal acetylcholine receptor subunit alpha-5, CHRNA5, NACHRA5

Target/Specificity
This CHRNA5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 187-216 amino acids from the Central region of human CHRNA5.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CHRNA5 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

CHRNA5 Antibody (Center) - 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).

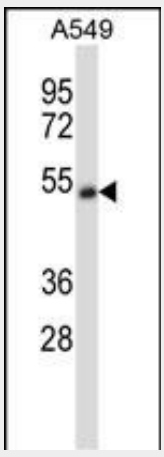
Cellular Location
Synaptic cell membrane {ECO:0000250|UniProtKB:P32297}; Multi-pass membrane protein. Cell membrane {ECO:0000250|UniProtKB:P32297}; Multi-pass membrane protein

CHRNA5 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CHRNA5 Antibody (Center) - Images



CHRNA5 Antibody (Center) (Cat. #AP14006c) western blot analysis in A549 cell line lysates (35ug/lane).This demonstrates the CHRNA5 antibody detected the CHRNA5 protein (arrow).

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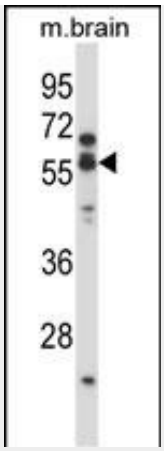

CHRNA5 Antibody (Center) (Cat. #AP14006c) western blot analysis in mouse brain tissue lysates (35ug/lane).This demonstrates the CHRNA5 antibody detected the CHRNA5 protein (arrow).

CHRNA5 Antibody (Center) - Background

The protein encoded by this gene is a nicotinic acetylcholine receptor subunit and a member of a superfamily of ligand-gated ion channels that mediate fast signal transmission at synapses. These receptors are thought to be heteropentamers composed of separate but similar subunits. Defects in this gene have been linked to susceptibility to lung cancer type 2 (LNCR2).

CHRNA5 Antibody (Center) - References

Wessel, J., et al. Neuropsychopharmacology 35(12):2392-2402(2010)
Erlich, P.M., et al. Hum. Genet. 128(5):491-499(2010)
Shimada, M., et al. Hum. Genet. 128(4):433-441(2010)
Falvella, F.S., et al. J. Natl. Cancer Inst. 102(17):1366-1370(2010)
Li, M.D., et al. PLoS ONE 5 (8), E12183 (2010) :