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# CHRNA5 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14006c

## Product Information

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|---|---|
| **Application** | WB, E |
| **Primary Accession** | P30532 |
| **Other Accession** | Q8SPU7, NP_000736.2 |
| **Reactivity** | Human, Mouse |
| **Predicted** | Bovine, Rat, Canine, Rabbit, Chicken |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB33909 |
| **Calculated MW** | 53054 |
| **Antigen Region** | 187-216 |

## Additional Information

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|---|---|
| **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. |

## Protein Information

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| **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

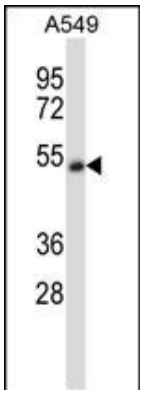
## Background

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).

## References

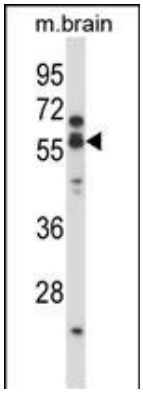

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## Images




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).

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).




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