

# CHRNA5 Rabbit pAb

Catalog # AP97950

## Product Information

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| <b>Application</b>             | IHC-P, IHC-F, IF, E                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Primary Accession</b>       | <a href="#">P30532</a>                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Other Accession</b>         | <a href="#">P30532</a>                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Predicted</b>               | Human                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Host</b>                    | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Clonality</b>               | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Calculated MW</b>           | 53054                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Physical State</b>          | Liquid                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Immunogen</b>               | KLH conjugated synthetic peptide derived from human CHRNA5                                                                                                                                                                                                                                                                                                                                                     |
| <b>Epitope Specificity</b>     | 151-250/468                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Isotype</b>                 | IgG                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Purity</b>                  | affinity purified by Protein A                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Buffer</b>                  | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.                                                                                                                                                                                                                                                                                                                                              |
| <b>SIMILARITY</b>              | Belongs to the ligand-gated ion channel (TC 1.A.9) family. Acetylcholine receptor (TC 1.A.9.1) subfamily. Alpha-5/CHRNA5 sub-subfamily.                                                                                                                                                                                                                                                                        |
| <b>Important Note</b>          | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.                                                                                                                                                                                                                                                                                      |
| <b>Background Descriptions</b> | 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).[provided by RefSeq, Jun 2010] |

## Additional Information

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| <b>Gene ID</b>     | 1138                                                                                                                                                                                                                                                                                                                                                  |
| <b>Other Names</b> | CK820_G0039824; LNCR2; ACHA5_CHICK; CHRNA5; ACHA5_PANTR; ACHA5_BOVIN; ACHA5_HUMAN; NACHRA5; cholinergic receptor nicotinic alpha 5 subunit; cholinergic receptor, nicotinic, alpha polypeptide 5; cholinergic receptor, nicotinic, alpha 5 (neuronal); cholinergic receptor, nicotinic alpha 5; acetylcholine receptor, nicotinic, alpha 5 (neuronal) |
| <b>Dilution</b>    | IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000                                                                                                                                                                                                                                                                      |
| <b>Storage</b>     | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.                                                                                                                                                       |

## Protein Information

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| <b>Name</b>              | CHRNA5 ( <a href="#">HGNC:1959</a> )                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Synonyms</b>          | NACHRA5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Function</b>          | <p>Component of neuronal acetylcholine receptors (nAChRs) that function as pentameric, ligand-gated cation channels with high calcium permeability among other activities. nAChRs are excitatory neurotransmitter 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:<a href="#">20881005</a>, PubMed:<a href="#">8663494</a>). Has an accessory rather than functional role and is only able to form functional nAChRs when co-assembled with another beta subunit (PubMed:<a href="#">20881005</a>, PubMed:<a href="#">8663494</a>). Participates in pentameric assemblies along with CHRNA3, CHRNA4, CHRNB2 and CHRNB4 (PubMed:<a href="#">20881005</a>, PubMed:<a href="#">8663494</a>). Increases receptor sensitivity to acetylcholine and nicotine when associated with CHRNA4 and CHRNB2 (PubMed:<a href="#">8663494</a>). Plays a role in nicotine addiction (PubMed:<a href="#">20881005</a>).</p> |
| <b>Cellular Location</b> | Synaptic cell membrane {ECO:0000250 UniProtKB:P32297}; Multi-pass membrane protein. Cell membrane {ECO:0000250 UniProtKB:P32297}; Multi-pass membrane protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

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