10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-CHRNA5 Picoband Antibody

Catalog # ABO10244

Specification

Anti-CHRNA5 Picoband Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	P30532
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Neuronal acetylcholine receptor subunit alpha-5(CHRNA5) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CHRNA5 Picoband Antibody - Additional Information

Gene ID 1138

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

Calculated MW
53054 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat

Western blot, 0.1-0.5 µg/ml, Human, Rat

Subcellular Localization
Cell junction, synapse, postsynaptic cell membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein.

Protein Name
Neuronal acetylcholine receptor subunit alpha-5

Contents
Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
A synthetic peptide corresponding to a sequence at the N-terminus of human CHRNA5 (44-76aa AKHEDSLLKDLFQDYERWVRPVEHLNDKIKIKF), different from the related mouse sequence by five amino acids, and from the related rat sequence by four amino acids.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage	**At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.**

Anti-CHRNA5 Picoband Antibody - 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

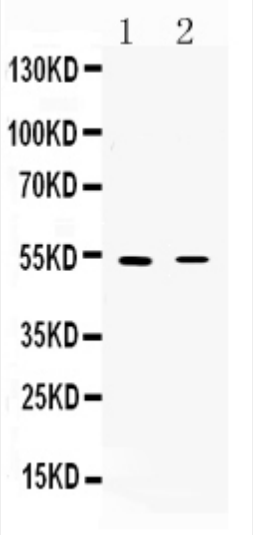
Anti-CHRNA5 Picoband Antibody - Protocols

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

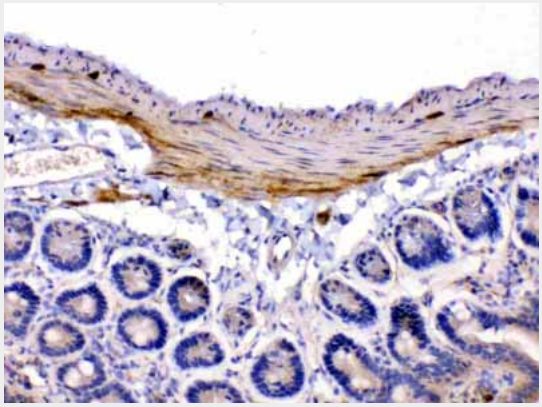
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-CHRNA5 Picoband Antibody - Images

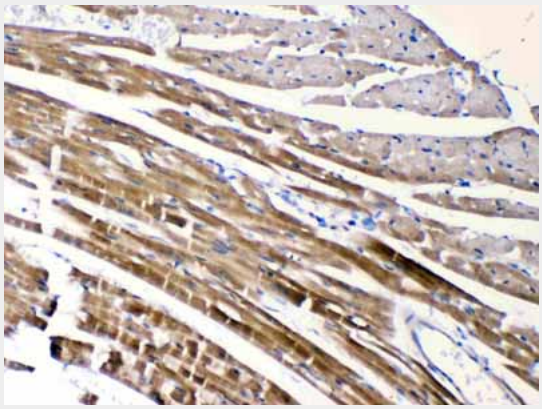
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



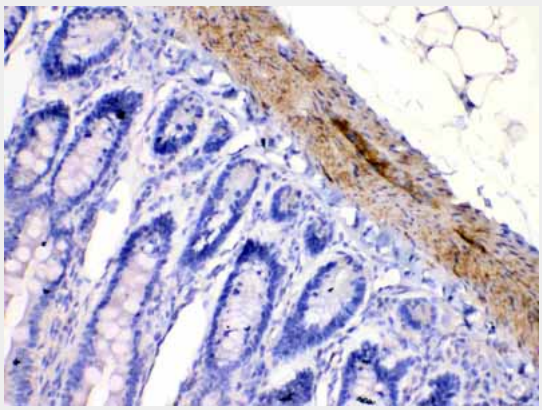
Western blot analysis of CHRNA5 expression in rat skeletal muscle extract (lane 1) and HEPG2 whole cell lysates (lane 2). CHRNA5 at 53KD was detected using rabbit anti- CHRNA5 Antigen Affinity purified polyclonal antibody (Catalog #ABO10244) at 0.5 Î¼g/mL. The blot was developed using chemiluminescence (ECL) method .



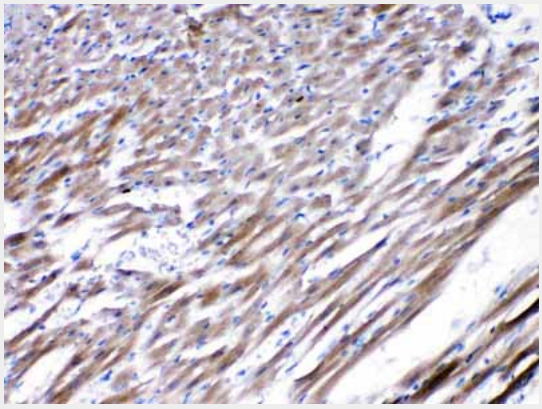
CHRNA5 was detected in paraffin-embedded sections of mouse intestine tissues using rabbit anti-CHRNA5 Antigen Affinity purified polyclonal antibody (Catalog # ABO10244) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .



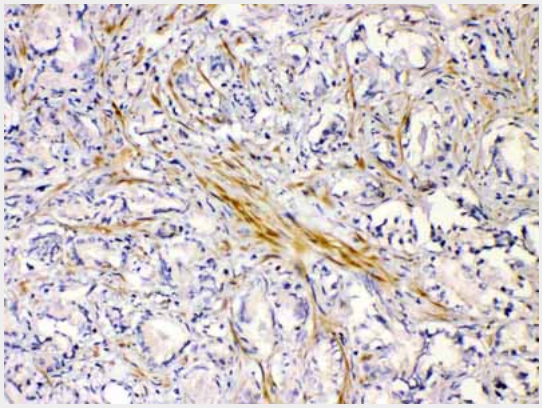
CHRNA5 was detected in paraffin-embedded sections of mouse cardiac muscle tissues using rabbit anti- CHRNA5 Antigen Affinity purified polyclonal antibody (Catalog # ABO10244) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .



CHRNA5 was detected in paraffin-embedded sections of rat intestine tissues using rabbit anti-CHRNA5 Antigen Affinity purified polyclonal antibody (Catalog # ABO10244) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .



CHRNA5 was detected in paraffin-embedded sections of rat cardiac muscle tissues using rabbit anti- CHRNA5 Antigen Affinity purified polyclonal antibody (Catalog # ABO10244) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .



CHRNA5 was detected in paraffin-embedded sections of human prostatic cancer tissues using rabbit anti- CHRNA5 Antigen Affinity purified polyclonal antibody (Catalog # ABO10244) at 1 Î¼g/mL. The immunohistochemical section was developed using SABC method .

Anti-CHRNA5 Picoband Antibody - Background

Neuronal acetylcholine receptor subunit alpha-5 is a protein that in humans is encoded by the CHRNA5 gene. It is mapped to 15q25.1. 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).