

# **Anti-Nicotinic Acetylcholine Receptor Alpha 1 Antibody**

Catalog # ABO10588

### **Specification**

### Anti-Nicotinic Acetylcholine Receptor Alpha 1 Antibody - Product Information

Application WB
Primary Accession P02708
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Acetylcholine receptor subunit alpha(CHRNA1) detection. Tested with WB in Human; Mouse; Rat.

#### Reconstitution

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

### Anti-Nicotinic Acetylcholine Receptor Alpha 1 Antibody - Additional Information

**Gene ID 1134** 

#### **Other Names**

Acetylcholine receptor subunit alpha, CHRNA1, ACHRA, CHNRA

# **Calculated MW**

54546 MW KDa

#### **Application Details**

Western blot, 0.1-0.5 μg/ml, Human, Rat, Mouse<br>

#### **Subcellular Localization**

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

### **Tissue Specificity**

Isoform 1 is only expressed in skeletal muscle. Isoform 2 is constitutively expressed in skeletal muscle, brain, heart, kidney, liver, lung and thymus.

#### **Protein Name**

Acetylcholine receptor subunit alpha

## Contents

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

#### **Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human Nicotinic Acetylcholine Receptor alpha 1(22-36aa EHETRLVAKLFKDYS), identical to the related rat sequence, different from the related mouse sequence by one amino acid.



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-Nicotinic Acetylcholine Receptor Alpha 1 Antibody - Protein Information

Name CHRNA1 (HGNC:1955)

Synonyms ACHRA, CHNRA

#### **Function**

[Isoform 1]: Upon acetylcholine binding, 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.

#### **Cellular Location**

Postsynaptic cell membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein

### **Tissue Location**

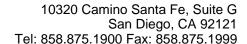
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### Anti-Nicotinic Acetylcholine Receptor Alpha 1 Antibody - Protocols

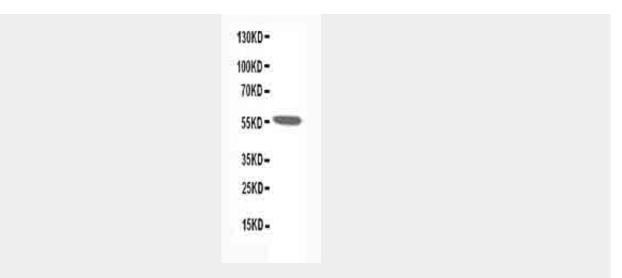
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### Anti-Nicotinic Acetylcholine Receptor Alpha 1 Antibody - Images







Anti-Nicotinic Acetylcholine Receptor alpha 1 antibody, ABO10588, Western blottingWB: Rat Skeletal Muscle Tissue Lysate

# Anti-Nicotinic Acetylcholine Receptor Alpha 1 Antibody - Background

CHRNA, also termed ACHRA, is mapped on 2q24-q32. This gene encodes the alpha subunit of the muscle acetylcholine receptor, which is the main target of pathogenic autoantibodies in autoimmune myasthenia gravis. The protein-coding sequence of the human alpha subu gene is divided into 9 exons that correspond to different structural and functional domains of the precursor molecule.