

# CHRNA7 Rabbit pAb

Catalog No.: A1588

4 Publications

## Basic Information

### Observed MW

### Calculated MW

54kDa

### Category

Primary antibody

### Applications

WB, IHC-P, IF/ICC, ELISA

### Cross-Reactivity

Human, Mouse, Rat

## Background

The nicotinic acetylcholine receptors (nAChRs) are members of a superfamily of ligand-gated ion channels that mediate fast signal transmission at synapses. The nAChRs are thought to be hetero-pentamers composed of homologous subunits. The proposed structure for each subunit is a conserved N-terminal extracellular domain followed by three conserved transmembrane domains, a variable cytoplasmic loop, a fourth conserved transmembrane domain, and a short C-terminal extracellular region. The protein encoded by this gene forms a homo-oligomeric channel, displays marked permeability to calcium ions and is a major component of brain nicotinic receptors that are blocked by, and highly sensitive to, alpha-bungarotoxin. Once this receptor binds acetylcholine, it undergoes an extensive change in conformation that affects all subunits and leads to opening of an ion-conducting channel across the plasma membrane. This gene is located in a region identified as a major susceptibility locus for juvenile myoclonic epilepsy and a chromosomal location involved in the genetic transmission of schizophrenia. An evolutionarily recent partial duplication event in this region results in a hybrid containing sequence from this gene and a novel FAM7A gene. Alternative splicing results in multiple transcript variants.

## Recommended Dilutions

WB 1:500 - 1:2000

IHC-P 1:50 - 1:200

IF/ICC 1:50 - 1:200

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

## Immunogen Information

### Gene ID

1139

### Swiss Prot

P36544

### Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

### Synonyms

NACHRA7; CHRNA7-2; CHRNA7

## Contact

☎ | 400-999-6126

✉ | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn)🌐 | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

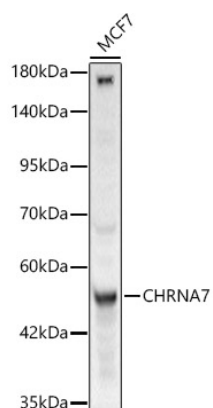
Affinity purification

### Storage

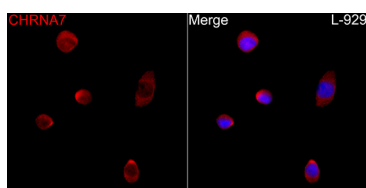
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH 7.3.

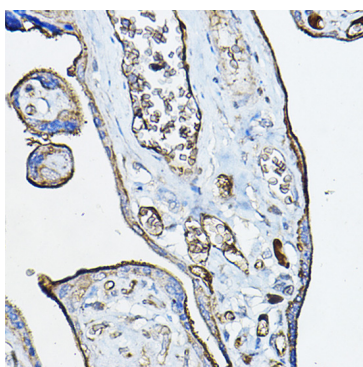
## Validation Data



Western blot analysis of lysates from MCF7 cells using CHRNA7 Rabbit pAb (A1588) at 1:2000 dilution. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 120s.



Immunofluorescence analysis of L-929 cells using CHRNA7 Rabbit pAb(A1588) at a dilution of 1:200 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L)(AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunohistochemistry analysis of paraffin-embedded Human placenta using CHRNA7 Rabbit pAb (A1588) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M PBS Buffer (pH 7.2) prior to IHC staining.