

A1588

Leader in Biomolecular Solutions for Life Science



CHRNA7 Rabbit pAb

Catalog No.: A1588

4 Publications

Basic Information

Observed MW

Calculated MW

54kDa

Category

Polyclonal 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.

Contact



www.abclonal.com

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

Product Information

Source

Rabbit

Isotype

IgG

Purification

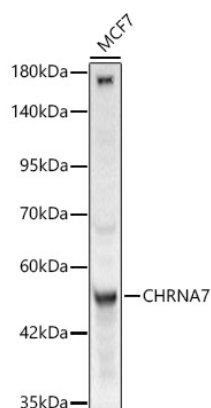
Affinity purification

Storage

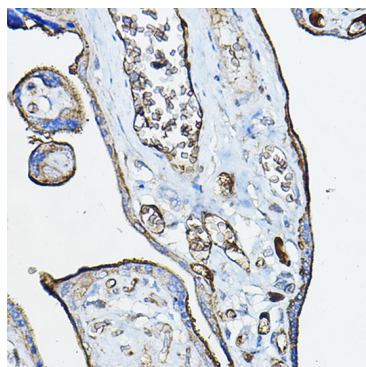
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

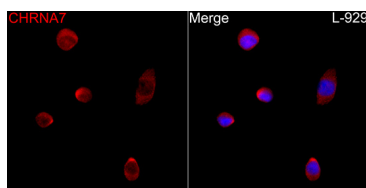
Validation Data



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.



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.



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.