

A1588

Leader in Biomolecular Solutions for Life Science



CHRNA7 Rabbit pAb

Catalog No.: A1588

2 Publications

Basic Information

Observed MW

Calculated MW

54kDa

Category

Mouse Monoclonal 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

Immunogen Information

Gene ID

1139

Swiss Prot

P36544

Immunogen

Recombinant fusion protein containing a sequence corresponding to amino acids 23-230 of human CHRNA7 (NP_001177384.1).

Synonyms

NACHRA7; CHRNA7-2; CHRNA7

Contact



www.abclonal.com

Product Information

Source

Rabbit

Isotype

IgG

Purification

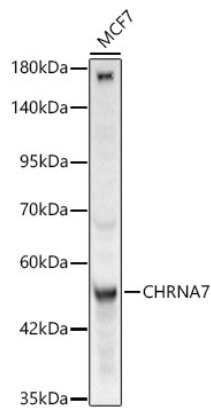
Affinity purification

Storage

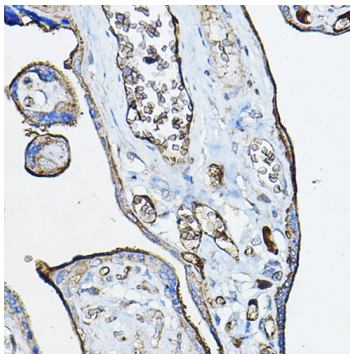
Store at -20°C. Avoid freeze / thaw cycles.

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

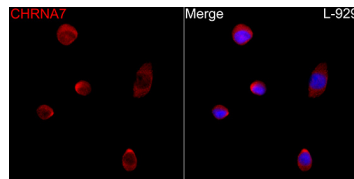
Validation Data



Western blot analysis of lysates from MCF7 cells using CHRNA7 Rabbit pAb(A1588) at 1:2000 dilution.
Secondary antibody: HRP 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 CHRNA7 in paraffin-embedded human placenta using CHRNA7 Rabbit pAb (A1588) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM PBS buffer pH 7.2 before commencing with IHC staining protocol.



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.