abcam

Product datasheet

Anti-Nicotinic Acetylcholine Receptor alpha 7 antibody ab216485

★★★★★ 5 Abreviews 13 References 9 Images

Overview

Product name Anti-Nicotinic Acetylcholine Receptor alpha 7 antibody

DescriptionRabbit polyclonal to Nicotinic Acetylcholine Receptor alpha 7

Host species Rabbit

Tested applications

Suitable for: IHC-P, WB, ICC/IF

Species reactivity

Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide within Human Nicotinic Acetylcholine Receptor alpha 7 aa 450 to the C-

terminus conjugated to keyhole limpet haemocyanin. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please **contact** our Scientific Support

team to discuss your requirements.

Database link: P36544

Run BLAST with
Run BLAST with

Positive control ICC/IF: HEK 293T cells. IHC-P: Mouse brain tissues, rat adrenal gland and human kidney tissue.

WB: mouse brain lysates, mouse lymph node lysates, mouse cerebrum lysates, mouse adrenal gland lysates, mouse placenta lysates, mouse lung lysates, mouse spleen lysates, mouse thymus lysates, human SH-SY5Y cell lysates, human U-87 MG cell lysates, human U251 cell lysates, rat cerebrum lysates, rat adrenal gland lysates, rat testis lysates and human HepG2 cell lysates.

General notesThe Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

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Storage buffer pH: 7.40

Preservative: 0.02% Proclin 300

Constituents: 50% Glycerol (glycerin, glycerine), 1% BSA, 48.98% TBS, 1X

Purity Protein A purified

Clonality Polyclonal

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab216485 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/100 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. When using a fluorescent probe the recommended dilution is 1/50 – 1/200.
WB	★★★★ <u>(3)</u>	1/100 - 1/1000. Predicted molecular weight: 56 kDa.
ICC/IF	★★★★☆(1)	1/500.

Target

Function After binding acetylcholine, 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

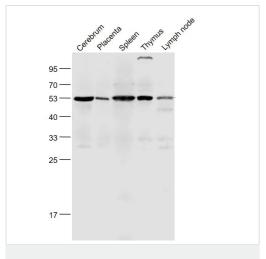
membrane. The channel is blocked by alpha-bungarotoxin.

Sequence similaritiesBelongs to the ligand-gated ion channel (TC 1.A.9) family. Acetylcholine receptor (TC 1.A.9.1)

subfamily. Alpha-7/CHRNA7 sub-subfamily.

Cellular localization Cell junction > synapse > postsynaptic cell membrane. Cell membrane.

Images



Western blot - Anti-Nicotinic Acetylcholine Receptor alpha 7 antibody (ab216485)

All lanes : Anti-Nicotinic Acetylcholine Receptor alpha 7 antibody (ab216485) at 1/1000 dilution

Lane 1: Rat Cerebrum lysates

Lane 2: Mouse Placenta lysates

Lane 3: Mouse Spleen lysates

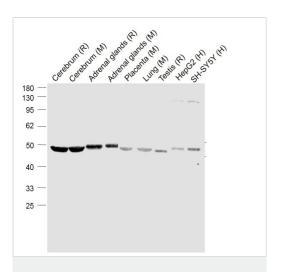
Lane 4: Mouse Thymus lysates

Lane 5: Mouse Lymph node lysates

Lysates/proteins at 1/1000 dilution per lane.

Predicted band size: 56 kDa

Probed with Anti-Nicotinic Acetylcholine Receptor alpha 7 antibody, Unconjugated (ab216485) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at 1:20000 for 60 min at 37°C.



Western blot - Anti-Nicotinic Acetylcholine Receptor alpha 7 antibody (ab216485)

All lanes : Anti-Nicotinic Acetylcholine Receptor alpha 7 antibody (ab216485) at 1/1000 dilution

Lane 1: Rat Cerebrum lysates at 1/1000 dilution

Lane 2: Mouse Cerebrum lysates at 1/1000 dilution

Lane 3: Rat Adrenal gland lysates at 1/1000 dilution

Lane 4: Mouse Adrenal gland lysates at 1/1000 dilution

Lane 5: Mouse Placenta lysates at 1/1000 dilution

Lane 6: Mouse Lung lysates at 1/1000 dilution

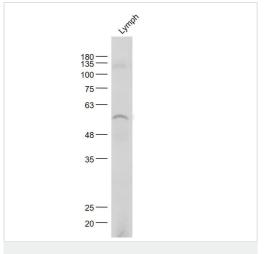
Lane 7: Rat Testis lysates at 1/1000 dilution

Lane 8: Human HepG2 cell lysates at 1/1000 dilution

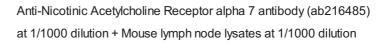
Lane 9: Human SH-SY5Y cell lysates at 1/1000 dilution

Predicted band size: 56 kDa

Probed with Anti-Nicotinic Acetylcholine Receptor alpha 7 Antibody, Unconjugated (ab216485) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at 1:20000 for 60 min at 37°C.

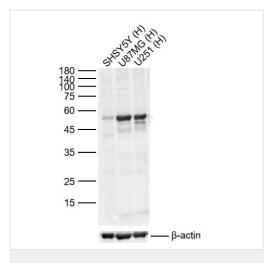


Western blot - Anti-Nicotinic Acetylcholine Receptor alpha 7 antibody (ab216485)



Predicted band size: 56 kDa

Mouse lymph node lysates probed with Anti-Nicotinic Acetylcholine Receptor alpha 7 Antibody, Unconjugated (AB216485) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at 1:20000 for 60 min at 37°C.



Western blot - Anti-Nicotinic Acetylcholine Receptor alpha 7 antibody (ab216485)

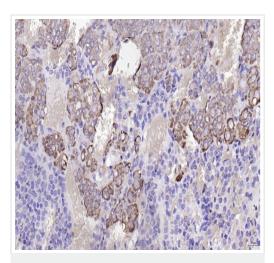
All lanes : Anti-Nicotinic Acetylcholine Receptor alpha 7 antibody (ab216485) at 1/1000 dilution

Lane 1: Human SH-SY5Y Cell Lysates
Lane 2: Human U-87 MG Cell Lysates
Lane 3: Human U251 Cell Lysates

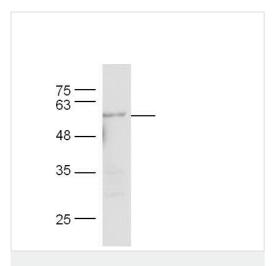
Lysates/proteins at 1/1000 dilution per lane.

Predicted band size: 56 kDa

Probed with Anti-Nicotinic Acetylcholine Receptor alpha 7 polyclonal Antibody, unconjugated (AB216485) at 1:1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at 1:20000 for 60 min at 37°C.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nicotinic Acetylcholine Receptor alpha 7 antibody (ab216485) Immunohistochemical analysis of paraformaldehyde-fixed and paraffin embedded rat adrenal gland labeling Nicotinic Acetylcholine Receptor alpha 7 using ab216485 at 1/200, followed by secondary detection and DAB staining.

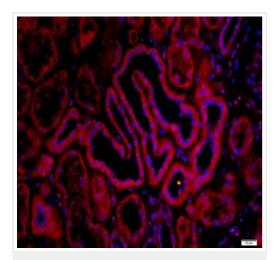


Western blot - Anti-Nicotinic Acetylcholine Receptor alpha 7 antibody (ab216485) Anti-Nicotinic Acetylcholine Receptor alpha 7 antibody (ab216485) at 1/300 dilution + mouse brain lysate

Secondary

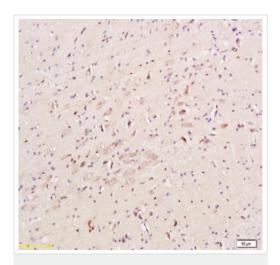
Goat Anti-Rabbit IgG Antibody (H+L), HRP Conjugated at 1/500 dilution

Predicted band size: 56 kDa



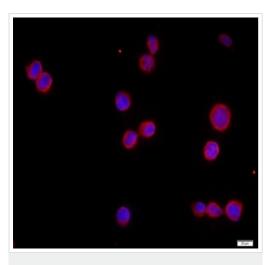
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nicotinic Acetylcholine
Receptor alpha 7 antibody (ab216485)

Immunohistochemical analysis of formalin-fixed and paraffin embedded human kidney tissue labeling Nicotinic Acetylcholine Receptor alpha 7 using ab216485 at 1/200, followed by Cy3 conjugated secondary Goat Anti-Rabbit lgG. DAPI was used to stain the cell nuclei.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Nicotinic Acetylcholine
Receptor alpha 7 antibody (ab216485)

Immunohistochemical analysis of formalin-fixed and paraffin embedded mouse brain tissue labeling Nicotinic Acetylcholine Receptor alpha 7 using ab216485 at 1/200, followed by secondary detection and DAB staining.



Immunocytochemistry/ Immunofluorescence - Anti-Nicotinic Acetylcholine Receptor alpha 7 antibody (ab216485)

Immunofluorescent analysis of HEK293 cells labeling Nicotinic Acetylcholine Receptor alpha 7 using ab216485 at 1/500 dilution, followed by secondary antibody Goat Anti-Rabbit IgG, Cy3 conjugated. DAPI staining of nuclei is shown too.

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