

Product datasheet

Anti-Acetylcholinesterase antibody [EPR18978]
ab183591

Recombinant RabMAb

5 References 9 Images

Overview

Product name	Anti-Acetylcholinesterase antibody [EPR18978]
Description	Rabbit monoclonal [EPR18978] to Acetylcholinesterase
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, IHC-Fr
Species reactivity	Reacts with: Mouse, Rat
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Mouse brain and striatum lysates; rat striatum, hippocampus and brain lysates. IHC-P: Mouse striatum and skeletal muscle tissues; rat striatum and skeletal muscle tissues. IHC-Fr: Mouse brain (Coronal section) and rat brain (sagittal section) tissues.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

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.
Storage buffer	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol, 0.05% BSA</p>
Purity	Protein A purified
Clonality	Monoclonal

Clone number EPR18978

Isotype IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab183591 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
WB		1/1000. Detects a band of approximately 68 kDa (predicted molecular weight: 68 kDa).
IHC-P		1/50. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IHC-Fr		1/1000. Antigen retrieval step: Heated citrate solution (10mM citrate pH 6.0 + 0.05% Tween-20)

Target

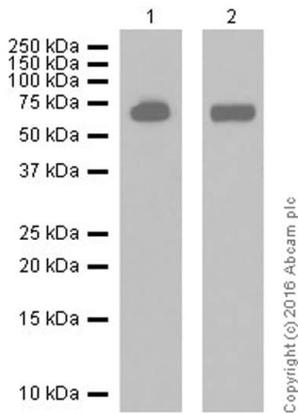
Function Terminates signal transduction at the neuromuscular junction by rapid hydrolysis of the acetylcholine released into the synaptic cleft. Role in neuronal apoptosis.

Tissue specificity Isoform H is highly expressed in erythrocytes.

Sequence similarities Belongs to the type-B carboxylesterase/lipase family.

Cellular localization Cell membrane; Cell junction > synapse. Secreted. Cell membrane and Nucleus. Only observed in apoptotic nuclei.

Images



Western blot - Anti-Acetylcholinesterase antibody [EPR18978] (ab183591)

All lanes : Anti-Acetylcholinesterase antibody [EPR18978] (ab183591) at 1/1000 dilution

Lane 1 : Mouse brain lysate

Lane 2 : Mouse striatum lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

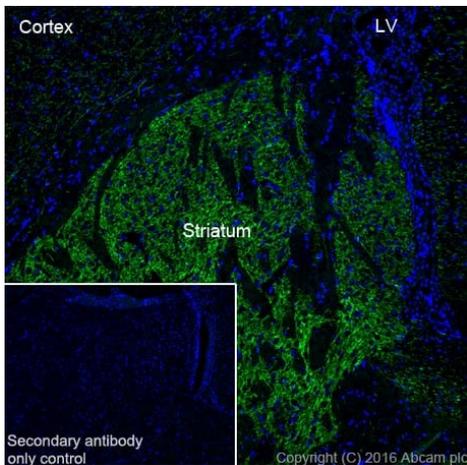
Predicted band size: 68 kDa

Observed band size: 68 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure times: Lane 1: 30 seconds, Lane 2: 3 minutes.

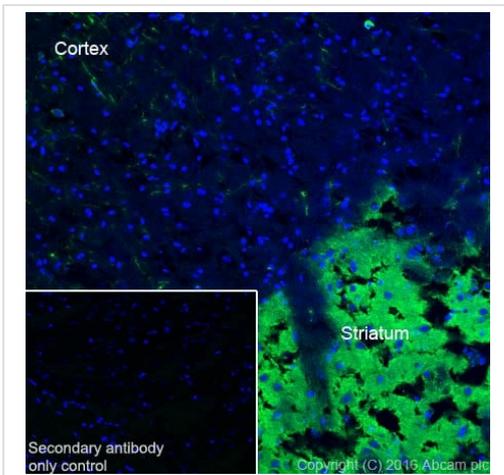
Acetylcholinesterase hydrolyzes the acetylcholine at neuromuscular junctions and brain cholinergic synapses, and thus terminates signal transmission (PMID: 2400605; PMID 8515842).



Immunohistochemistry (Frozen sections) - Anti-Acetylcholinesterase antibody [EPR18978] (ab183591)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen Mouse brain (Coronal section) tissue labeling Acetylcholinesterase with ab183591 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). The result showed high expression on Mouse striatum. The nuclear counterstain is DAPI (blue).

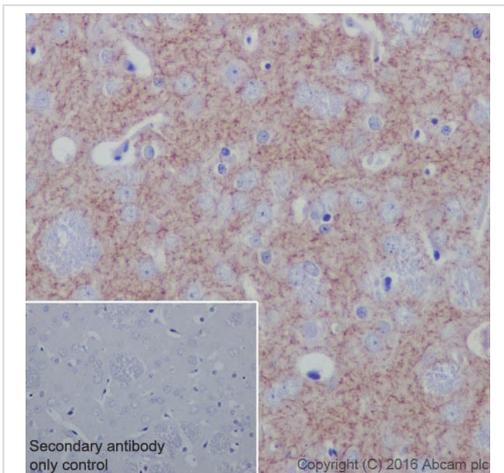
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab150077 at 1/1000 dilution



Immunohistochemistry (Frozen sections) - Anti-Acetylcholinesterase antibody [EPR18978] (ab183591)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen Rat brain (sagittal section) tissue labeling Acetylcholinesterase with ab183591 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). The result showed high expression on Rat striatum. The nuclear counterstain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab150077 at 1/1000 dilution.

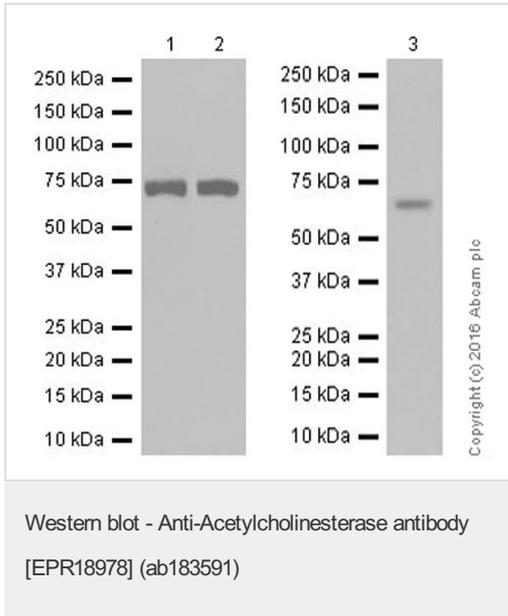


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Acetylcholinesterase antibody [EPR18978] (ab183591)

Immunohistochemical analysis of paraffin-embedded Rat striatum tissue labeling Acetylcholinesterase with ab183591 at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Membrane staining on Rat striatum is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab97051 at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



All lanes : Anti-Acetylcholinesterase antibody [EPR18978] (ab183591) at 1/1000 dilution

Lane 1 : Rat striatum lysate

Lane 2 : Rat hippocampus lysate

Lane 3 : Rat brain lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

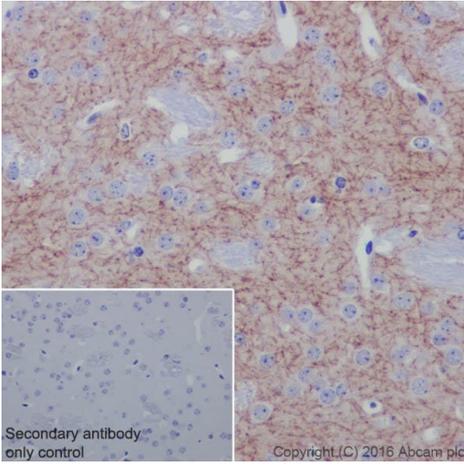
Predicted band size: 68 kDa

Observed band size: 68 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDm/TBST.

Acetylcholinesterase hydrolyzes the acetylcholine at neuromuscular junctions and brain cholinergic synapses, and thus terminates signal transmission (PMID: 2400605; PMID 8515842).

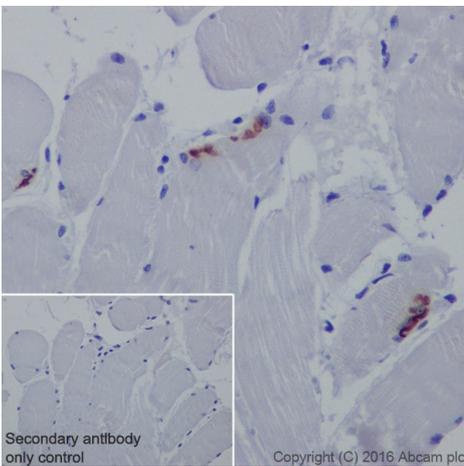


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Acetylcholinesterase antibody [EPR18978] (ab183591)

Immunohistochemical analysis of paraffin-embedded Mouse striatum tissue labeling Acetylcholinesterase with ab183591 at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Membrane staining on Mouse striatum is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab97051 at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

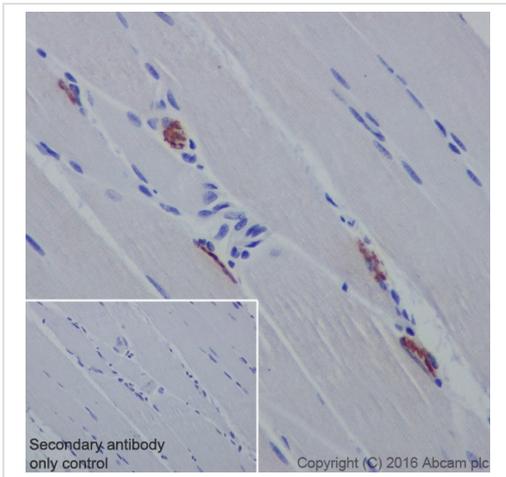


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Acetylcholinesterase antibody [EPR18978] (ab183591)

Immunohistochemical analysis of paraffin-embedded Mouse skeletal muscle tissue labeling Acetylcholinesterase with ab183591 at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Positive staining on neuromuscular junction of Mouse skeletal muscle is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab97051 at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemical analysis of paraffin-embedded Rat skeletal muscle tissue labeling Acetylcholinesterase with ab183591 at 1/50 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Positive staining on neuromuscular junction of Rat skeletal muscle is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is ab97051 at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Acetylcholinesterase antibody [EPR18978] (ab183591)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-Acetylcholinesterase antibody [EPR18978] (ab183591)

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