

## Product datasheet

# Anti-Choline Acetyltransferase antibody [EPR16590] ab178850

Recombinant RabMAb

★★★★★ **6 Abreviews**   **39 References**   [8 Images](#)

### Overview

<b>Product name</b>	Anti-Choline Acetyltransferase antibody [EPR16590]
<b>Description</b>	Rabbit monoclonal [EPR16590] to Choline Acetyltransferase
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Rabbit, Guinea pig
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: Rat brain lysate; Rabbit brain lysate; Guinea Pig brain and cerebellum lysates. IHC-P: Mouse cerebral cortex tissue, Guinea Pig cerebral cortex tissue,
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR16590
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab178850 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)	1/1000. Detects a band of approximately 72 kDa (predicted molecular weight: 72 kDa).
IHC-P	★★★★★ (2)	1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

## Target

### Function

Catalyzes the reversible synthesis of acetylcholine (ACh) from acetyl CoA and choline at cholinergic synapses.

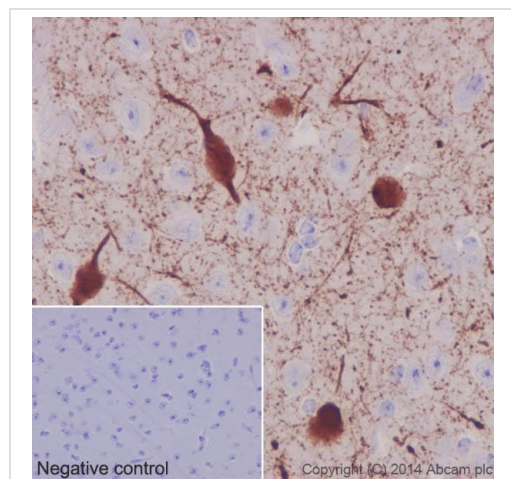
### Involvement in disease

Myasthenic syndrome, congenital, 6, presynaptic

### Sequence similarities

Belongs to the carnitine/choline acetyltransferase family.

## Images

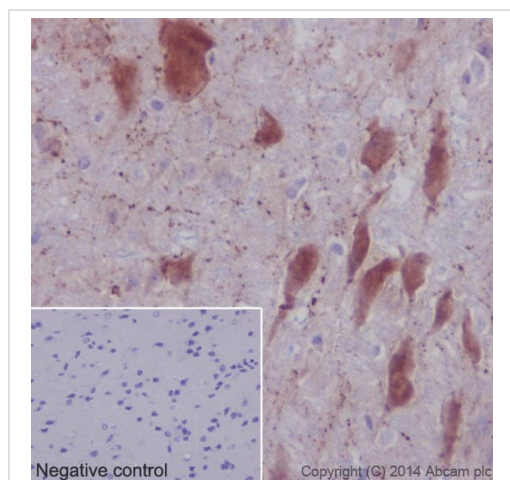


Immunohistochemical analysis of paraffin-embedded Guinea Pig cerebral cortex tissue labeling Choline Acetyltransferase with ab178850 at 1/2000 followed by prediluted HRP Polymer for Rabbit/Mouse IgG. Nucleus and cytoplasm staining on neurons of Guinea Pig cerebral cortex is observed. Counter stained with Hematoxylin.

Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse IgG.

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-Choline Acetyltransferase antibody [EPR16590] (ab178850)

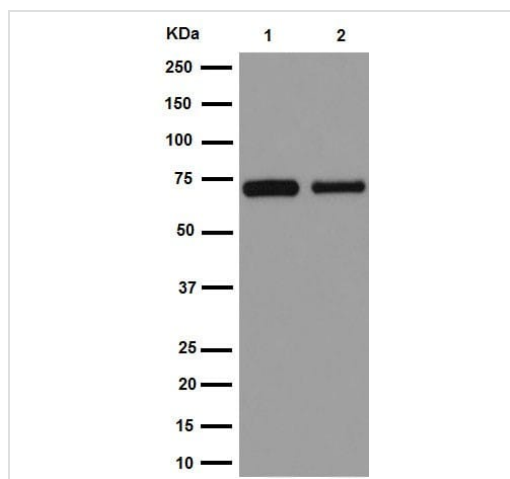


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Choline Acetyltransferase antibody [EPR16590] (ab178850)

Immunohistochemical analysis of paraffin-embedded Mouse cerebral cortex tissue labeling Choline Acetyltransferase with ab178850 at 1/2000 followed by prediluted HRP Polymer for Rabbit/Mouse IgG. Nucleus and cytoplasm staining on neurons of Mouse cerebral cortex is observed. Counter stained with Hematoxylin.

Negative control: Using PBS instead of primary ab, secondary ab is prediluted HRP Polymer for Rabbit/Mouse IgG.

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



Western blot - Anti-Choline Acetyltransferase antibody [EPR16590] (ab178850)

**All lanes :** Anti-Choline Acetyltransferase antibody [EPR16590] (ab178850) at 1/5000 dilution

**Lane 1 :** Guinea Pig brain lysate

**Lane 2 :** Guinea Pig cerebellum lysate

Lysates/proteins at 20 µg per lane.

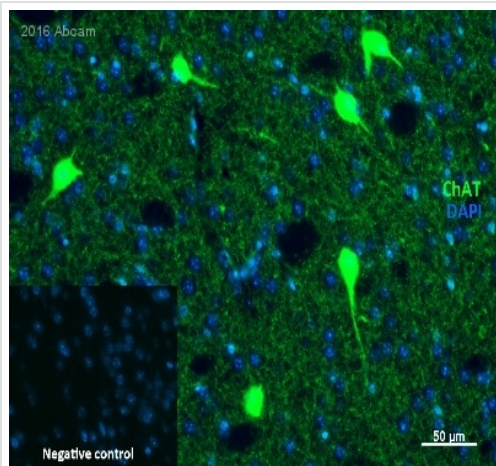
#### Secondary

**All lanes :** Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

**Predicted band size:** 72 kDa

**Observed band size:** 72 kDa

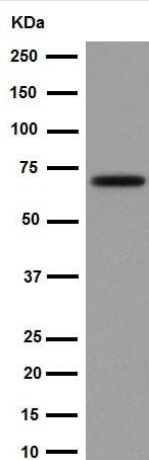
Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Choline Acetyltransferase antibody [EPR16590] (ab178850)

This image is courtesy of an anonymous abreview.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse brain tissue sections labeling Choline Acetyltransferase with ab178850 at 1/2000 dilution. Cells were fixed in 10% normal buffered formalin, heat mediated antigen retrieval was performed using TE pH9. A donkey anti-rabbit Alexa Fluor 647 was used as the secondary antibody at 1/300 dilution. Green was a false colour used to represent the Alexa Fluor 647 fluorescent signal.



Western blot - Anti-Choline Acetyltransferase antibody [EPR16590] (ab178850)

Anti-Choline Acetyltransferase antibody [EPR16590] (ab178850) at 1/1000 dilution + Rabbit brain lysate at 10 μg

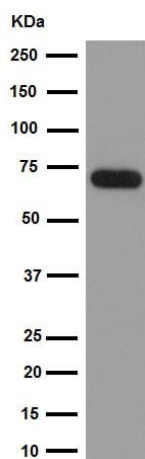
### Secondary

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

**Predicted band size:** 72 kDa

**Observed band size:** 72 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.



Western blot - Anti-Choline Acetyltransferase antibody [EPR16590] (ab178850)

Anti-Choline Acetyltransferase antibody [EPR16590] (ab178850) at 1/1000 dilution + Rat brain lysate at 10 µg

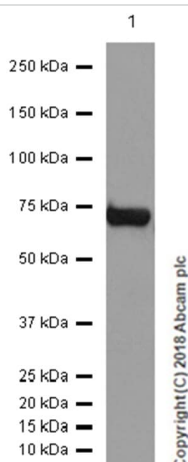
#### Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 72 kDa

**Observed band size:** 72 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Choline Acetyltransferase antibody [EPR16590] (ab178850)

Anti-Choline Acetyltransferase antibody [EPR16590] (ab178850) at 1/2000 dilution + Mouse brain tissue lysate at 20 µg with 5% NFDM/TBST

#### Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 72 kDa

**Observed band size:** 72 kDa

**Exposure time:** 3 minutes

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Choline Acetyltransferase antibody [EPR16590]  
(ab178850)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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