

## Product datasheet

# Anti-ENO1 + ENO2 + ENO3 antibody [EPR18422] ab189892

Recombinant RabMAb

5 Images

### Overview

<b>Product name</b>	Anti-ENO1 + ENO2 + ENO3 antibody [EPR18422]
<b>Description</b>	Rabbit monoclonal [EPR18422] to ENO1 + ENO2 + ENO3
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Recombinant fragment within Human ENO1 + ENO2 + ENO3 aa 250 to the C-terminus. The exact sequence is proprietary. from ENO1. Database link: <a href="#">P06733</a>
<b>Positive control</b>	WB: Human ENO1 full length recombinant protein, Human ENO2 full length recombinant protein, Human ENO3 full length recombinant protein, Human fetal liver lysate, Human fetal heart lysate, Human fetal kidney lysate, Human fetal spleen lysate, Mouse brain lysate, Mouse heart lysate, Mouse kidney lysate, Mouse spleen lysate, Rat brain lysate, Rat heart lysate, Rat spleen lysate, HeLa, Jurkat MCF7 , A431, C6, Raw264.7 and NIH/3T3 whole cell lysates

### General notes

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information [see here](#).

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in

our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as customer reviews and Q&As.

## 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>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR18422
<b>Isotype</b>	IgG

## Applications

---

Our [Abpromise guarantee](#) covers the use of **ab189892** 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 47 kDa (predicted molecular weight: 47 kDa).

---

## Target

---

### Relevance

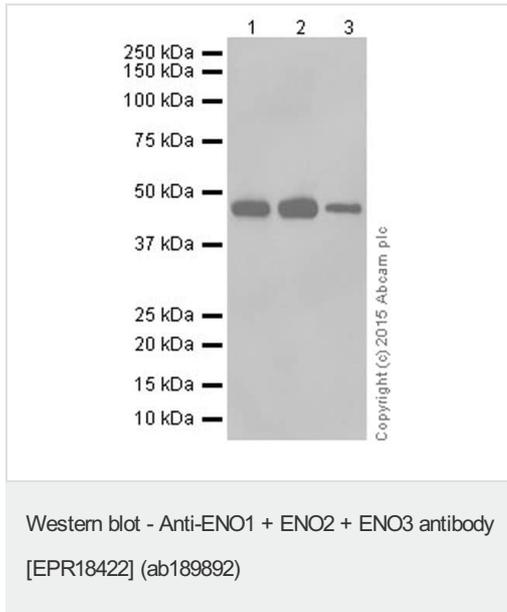
Enolase 1 is a multifunctional enzyme that, as well as its role in glycolysis, plays a part in various processes such as growth control, hypoxia tolerance and allergic responses. May also function in the intravascular and pericellular fibrinolytic system due to its ability to serve as a receptor and activator of plasminogen on the cell surface of several cell-types such as leukocytes and neurons. Stimulates immunoglobulin production. MBP1 binds to the myc promoter and acts as a transcriptional repressor. May be a tumor suppressor. Enolase 2 has neurotrophic and neuroprotective properties on a broad spectrum of central nervous system (CNS) neurons. Binds, in a calcium-dependent manner, to cultured neocortical neurons and promotes cell survival.

Enolase 3 appears to have a function in striated muscle development and regeneration.

## Cellular localization

ENO1: Cytoplasm. Cell membrane. Cytoplasm, myofibril, sarcomere, M-band. Note: Can translocate to the plasma membrane in either the homodimeric (alpha/alpha) or heterodimeric (alpha/gamma) form. ENO1 is localized to the M-band. ENO2: Cytoplasm. Cell membrane. Note: Can translocate to the plasma membrane in either the homodimeric (alpha/alpha) or heterodimeric (alpha/gamma) form ENO3: Cytoplasm. Note: Localized to the Z line. Some colocalization with CKM at M-band.

## Images



**All lanes :** Anti-ENO1 + ENO2 + ENO3 antibody [EPR18422] (ab189892) at 1/5000 dilution

**Lane 1 :** Human ENO1 full length recombinant protein

**Lane 2 :** Human ENO2 full length recombinant protein

**Lane 3 :** Human ENO3 full length recombinant protein

Lysates/proteins at 0.02 µg per lane.

### Secondary

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

Developed using the ECL technique.

**Predicted band size:** 47 kDa

**Observed band size:** 47 kDa

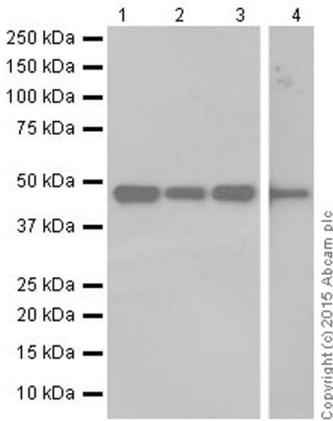
**Exposure time:** 5 seconds

Blocking and diluting buffer 5% NFDM /TBST.

Human ENO1 full length recombinant protein (Cat#:ab89248) containing aa1-434.

Human ENO2 full length recombinant protein containing aa1-434 with a His-Tag®.

Human ENO3 full length recombinant protein (Cat#:ab113127) containing aa1-434 with a His-Tag®. Human ENO2 full length recombinant protein was made in-house.



Western blot - Anti-ENO1 + ENO2 + ENO3 antibody [EPR18422] (ab189892)

**All lanes :** Anti-ENO1 + ENO2 + ENO3 antibody [EPR18422] (ab189892) at 1/5000 dilution

**Lane 1 :** Human fetal liver lysate

**Lane 2 :** Human fetal heart lysate

**Lane 3 :** Human fetal kidney lysate

**Lane 4 :** Human fetal spleen lysate

Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes :** Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

Developed using the ECL technique.

**Predicted band size:** 47 kDa

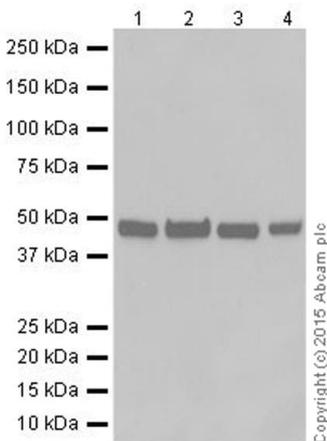
**Observed band size:** 47 kDa

**Exposure time:** 5 seconds

Blocking and diluting buffer 5% NFDM /TBST.

Exposure time - Lane 1,2 and 3:5 seconds;

Lane 4: 30 seconds



Western blot - Anti-ENO1 + ENO2 + ENO3 antibody [EPR18422] (ab189892)

**All lanes :** Anti-ENO1 + ENO2 + ENO3 antibody [EPR18422] (ab189892) at 1/5000 dilution

**Lane 1 :** HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

**Lane 2 :** Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate

**Lane 3 :** MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

**Lane 4 :** A431 (Human epidermoid carcinoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

## Secondary

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

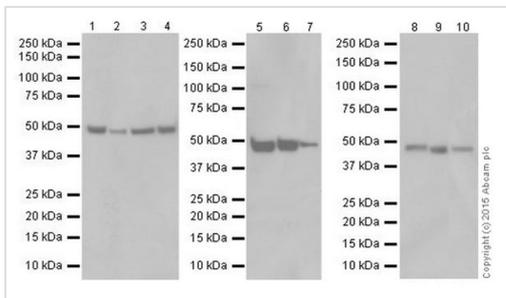
Developed using the ECL technique.

**Predicted band size:** 47 kDa

**Observed band size:** 47 kDa

**Exposure time:** 3 seconds

Blocking and diluting buffer was 5% NFDM /TBST.



Western blot - Anti-ENO1 + ENO2 + ENO3 antibody [EPR18422] ([ab189892](#))

**Lanes 1-7** : Anti-ENO1 + ENO2 + ENO3 antibody [EPR18422] ([ab189892](#)) at 1/5000 dilution

**Lanes 8-10** : Anti-ENO1 + ENO2 + ENO3 antibody [EPR18422] ([ab189892](#)) at 1/1000 dilution

**Lane 1** : Mouse brain lysate

**Lane 2** : Mouse heart lysate

**Lane 3** : Mouse kidney lysate

**Lane 4** : Mouse spleen lysate

**Lane 5** : Rat brain lysate

**Lane 6** : Rat heart lysate

**Lane 7** : Rat spleen lysate

**Lane 8** : C6 (Rat gliial tumor cell line) whole cell lysate

**Lane 9** : Raw264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate

**Lane 10** : NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

## Secondary

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

Developed using the ECL technique.

**Predicted band size:** 47 kDa

**Observed band size:** 47 kDa

**Exposure time:** 1 second

Blocking and diluting buffer was 5% NFDM /TBST.

Exposure time - Lane 1-4 and 8-10: 1 second;

Lane 5-7: 3 seconds;

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-ENO1 + ENO2 + ENO3 antibody [EPR18422]  
(ab189892)

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

### Our Abpromise to you: Quality guaranteed and expert technical support

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- 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

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors