abcam

Product datasheet

Anti-ENO1 + ENO2 + ENO3 antibody [EPR18407] ab189891

Recombinant RabMAb

1 References 8 Images

Overview

Product name	Anti-ENO1 + ENO2 + ENO3 antibody [EPR18407]
Description	Rabbit monoclonal [EPR18407] to ENO1 + ENO2 + ENO3
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), ICC/IF, WB
Species reactivity	**Reacts with:** Mouse, Rat, Human, Recombinant fragment
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human ENO1, ENO2 and ENO3 full length recombinant proteins; Human fetal heart, fetal kidney and fetal spleen lysates; HeLa, Jurkat, MCF7, A431, C6, RAW 264.7 and NIH/3T3 whole cell lysates; Mouse brain and heart lysates; Rat brain and heart lysates. ICC/IF: HeLa and NIH/3T3 cells. Flow Cyt (intra): NIH/3T3 cells.
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® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

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	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR18407
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab189891 in the following tested applications.

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

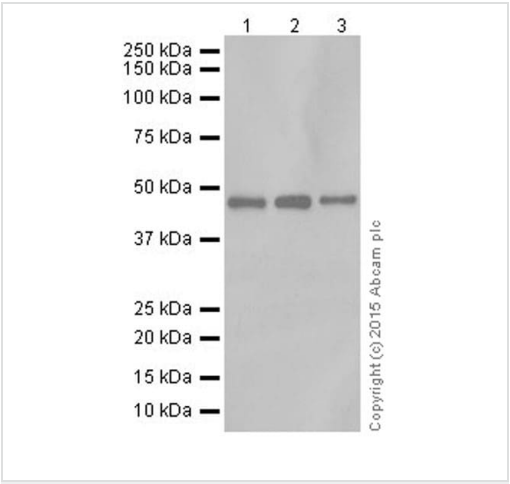
Application	Abreviews	Notes
Flow Cyt (Intra)		1/70.
ICC/IF		1/500.
WB		1/1000. Detects a band of approximately 47 kDa (predicted molecular weight: 47 kDa).

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



Western blot - Anti-ENO1 + ENO2 + ENO3 antibody [EPR18407] (ab189891)

All lanes : Anti-ENO1 + ENO2 + ENO3 antibody [EPR18407] (ab189891) at 1/1000 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.

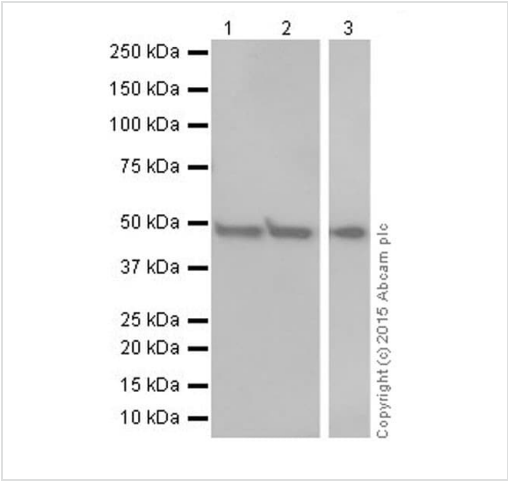
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 47 kDa
Observed band size: 47 kDa

Exposure time: 5 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

Human ENO1 full length recombinant protein (Cat#:**ab89248**) contains aa1-434. Human ENO2 full length recombinant protein contains aa1-434 with a His-Tag®. Human ENO3 full length recombinant protein(Cat#:**ab113127**) contains aa1-434 with a His-Tag®. Human ENO2 full length recombinant protein was made in-house.



Western blot - Anti-ENO1 + ENO2 + ENO3 antibody [EPR18407] (ab189891)

All lanes : Anti-ENO1 + ENO2 + ENO3 antibody [EPR18407] (ab189891) at 1/1000 dilution

Lane 1 : Human fetal heart lysate
Lane 2 : Human fetal kidney lysate
Lane 3 : Human fetal spleen lysate

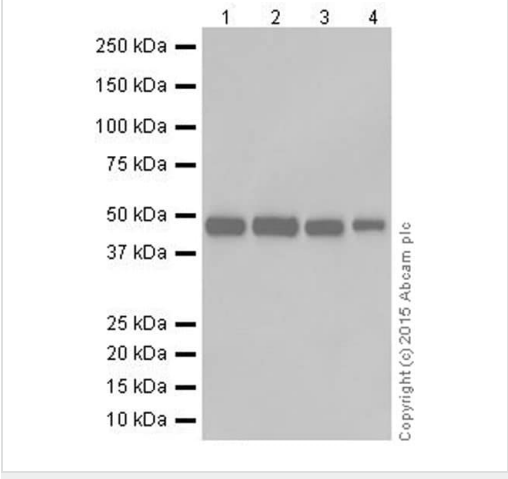
Lysates/proteins at 10 µg per lane.

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

Predicted band size: 47 kDa
Observed band size: 47 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time : Lane 1 and 2: 5 seconds; Lane 3: 15 seconds.



Western blot - Anti-ENO1 + ENO2 + ENO3 antibody [EPR18407] (ab189891)

All lanes : Anti-ENO1 + ENO2 + ENO3 antibody [EPR18407] (ab189891) 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.

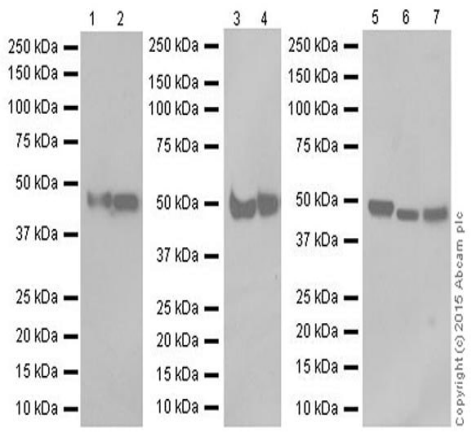
Secondary

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

Predicted band size: 47 kDa
Observed band size: 47 kDa

Exposure time: 3 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-ENO1 + ENO2 + ENO3 antibody [EPR18407] (ab189891)

Lanes 1-4 : Anti-ENO1 + ENO2 + ENO3 antibody [EPR18407] (ab189891) at 1/1000 dilution
Lanes 5-7 : Anti-ENO1 + ENO2 + ENO3 antibody [EPR18407] (ab189891) at 1/5000 dilution

Lane 1 : Mouse brain tissue lysate
Lane 2 : Mouse heart tissue lysate
Lane 3 : Rat brain tissue lysate
Lane 4 : Rat heart tissue lysate
Lane 5 : C6 (Rat glial tumor cell line) whole cell lysate
Lane 6 : RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate
Lane 7 : NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell lysate

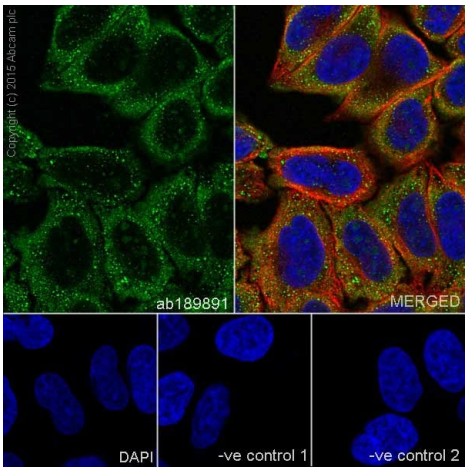
Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/10000 dilution

Predicted band size: 47 kDa
Observed band size: 47 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time : Lane 1-4: 5 seconds; Lane 5-7: 1 second.



Immunocytochemistry/ Immunofluorescence - Anti-ENO1 + ENO2 + ENO3 antibody [EPR18407] (ab189891)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling ENO1 + ENO2 + ENO3 with ab189891 at 1/500 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Confocal image showing mostly cytoplasmic staining on Hela cells.

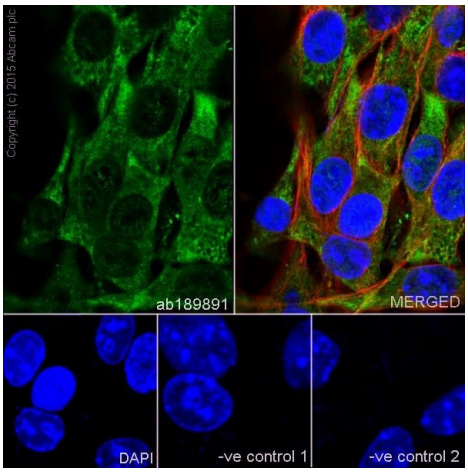
The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin - Loading Control (**ab7291**) at 1/1000 dilution and Goat Anti-Mouse IgG (AlexaFluor®594) preadsorbed (**ab150120**) at 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: ab189891 at 1/500 dilution followed by **ab150120** at 1/1000 dilution.

-ve control 2: **ab7291** at 1/1000 dilution followed by **ab150077** at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-ENO1 + ENO2 + ENO3 antibody [EPR18407] (ab189891)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized NIH/3T3 (Mouse embryonic fibroblast cell line) cells labeling ENO1 + ENO2 + ENO3 with ab189891 at 1/500 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Confocal image showing mostly cytoplasmic staining on NIH/3T3 cells.

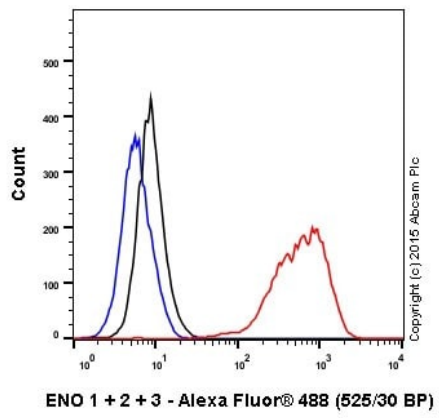
The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin antibody -Loading Control (**ab7291**) at 1/1000 dilution and Goat Anti-Mouse IgG (AlexaFluor®594) preadsorbed (**ab150120**) at 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: ab189891 at 1/500 dilution followed by **ab150120** at 1/1000 dilution.

-ve control 2: **ab7291** at 1/1000 dilution followed by **ab150077** at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-ENO1 + ENO2 + ENO3 antibody [EPR18407] (ab189891)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed NIH/3T3 (Mouse embryonic fibroblast cell line) labeling ENO1 + ENO2 + ENO3 with ab189891 at 1/70 dilution (red) compared with a Rabbit IgG,monoclonal- Isotype control (**ab172730**) (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat anti Rabbit IgG (Alexa Fluor® 488) at 1/500 dilution was used as the secondary antibody.

Anti-ENO1 + ENO2 + ENO3 antibody [EPR18407] (ab189891)

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