# abcam

# Product datasheet

# Anti-Aldolase + Aldolase C antibody [EPR19355] - Astrocyte Marker ab200049

Recombinant RabMAb

# 1 References 7 Images

#### Overview

Product name Anti-Aldolase + Aldolase C antibody [EPR19355] - Astrocyte Marker

**Description** Rabbit monoclonal [EPR19355] to Aldolase + Aldolase C - Astrocyte Marker

Host species Rabbit

Tested applications Suitable for: WB, ICC/IF, Flow Cyt (Intra)

Species reactivity Reacts with: Mouse, Rat, Human

**Immunogen** Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: Human Aldolase C full length recombinant protein; human Aldolase full length recombinant

protein; HeLa, U-87 MG, C6, RAW 264.7 and NIH/3T3 whole cell lysates; human cerebellum, fetal liver, fetal heart, fetal kidney and fetal spleen lysates; rat brain and kidney lysates; mouse brain

and heart lysates. ICC/IF: U-87 MG and NIH/3T3 cells. Flow Cyt (intra): U-87 MG 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<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**.

#### **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

1

Clone number EPR19355

**Isotype** IgG

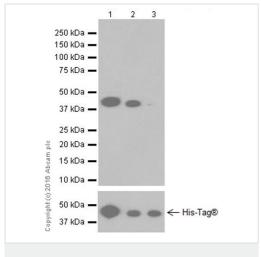
#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab200049 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		1/2000. Detects a band of approximately 39 kDa (predicted molecular weight: 39 kDa).
ICC/IF		1/500.
Flow Cyt (Intra)		1/600.

#### **Images**



Western blot - Anti-Aldolase + Aldolase C antibody [EPR19355] - Astrocyte Marker (ab200049) **All lanes :** Anti-Aldolase + Aldolase C antibody [EPR19355] - Astrocyte Marker (ab200049) at 1/1000 dilution

Lane 1 : Human Aldolase C full length recombinant protein

Lane 2 : Human Aldolase full length recombinant protein

Lane 3: Human Aldolase B full length recombinant protein

Lysates/proteins at 0.01 µg per lane.

# Secondary

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

1/100000 dilution

Predicted band size: 39 kDa Observed band size: 39 kDa

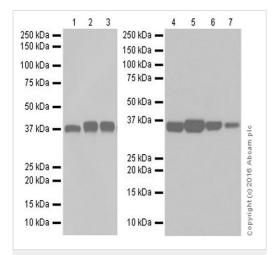
Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

Human ALDOC full length recombinant protein contains aa2-364 with a His-Tag®. Human ALDOA and ALDOB full length recombinant protein contains aa1-364 with a His-Tag®. These

three recombinant proteins were made in-house.

This product showed very weak reactivity to Aldolase B, relative to Aldolase and Aldolase C, as demonstrated by WB of recombinant proteins.



Western blot - Anti-Aldolase + Aldolase C antibody [EPR19355] - Astrocyte Marker (ab200049) Lanes 1-3: Anti-Aldolase + Aldolase C antibody [EPR19355] -

Astrocyte Marker (ab200049) at 1/5000 dilution

Lanes 4-7: Anti-Aldolase + Aldolase C antibody [EPR19355] -

Astrocyte Marker (ab200049) at 1/2000 dilution

Lane 1 : HeLa (Human epithelial cell line from cervix

adenocarcinoma) whole cell lysate

Lane 2: U 87 MG (Human glioblastoma-astrocytoma epithelial cell

line) whole cell lysate

Lane 3: Human cerebellum lysate

Lane 4: Human fetal liver lysate

Lane 5: Human fetal heart lysate

Lane 6: Human fetal kidney lysate

Lane 7: human fetal spleenlysate

Lysates/proteins at 10 µg per lane.

#### Secondary

 $\textbf{Lanes 1-3}: \textbf{Goat Anti-Rabbit IgG H\&L (HRP)} \ (\underline{\textbf{ab97051}}) \ \textbf{at}$ 

1/100000 dilution

Lanes 4-7: Goat Anti-Rabbit IgG Peroxidase Conjugate, specific

to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 39 kDa

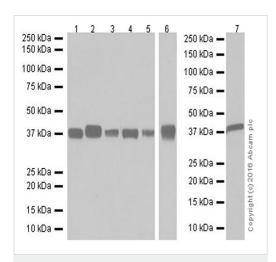
Additional bands at: 39 kDa (possible non-specific secondary

antibody binding)

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1-3: 8 seconds; Lane 4-7: 10 seconds.

The expression profile observed is consistent with what has been described in the literature (PMID: 24475166 and 17659271).



Western blot - Anti-Aldolase + Aldolase C antibody [EPR19355] - Astrocyte Marker (ab200049)

Lanes 1-6: Anti-Aldolase + Aldolase C antibody [EPR19355] -

Astrocyte Marker (ab200049) at 1/5000 dilution

Lane 7: Anti-Aldolase + Aldolase C antibody [EPR19355] -

Astrocyte Marker (ab200049) at 1/2000 dilution

Lane 1: C6 (Rat glial tumor cell line) whole cell lysate

Lane 2: Rat brain tissue lysate

Lane 3: Rat kidney tissue lysate

Lane 4: Mouse heart tissue lysate

Lane 5: RAW 264.7 (Mouse macrophage cell line transformed

with Abelson murine leukemia virus) whole cell lysate

Lane 6: Mouse brain tissue lysate

Lane 7: NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell

lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

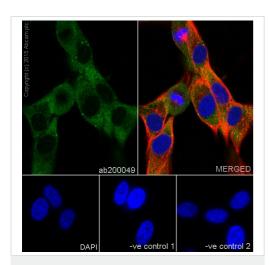
All lanes : Goat Anti-Rabbit  $\lg G \ H\&L \ (HRP) \ (\underline{ab97051})$  at

1/100000 dilution

Predicted band size: 39 kDa Observed band size: 39 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1-5: 8 seconds; Lane 6/7: 3 seconds.



Immunocytochemistry/ Immunofluorescence - Anti-Aldolase + Aldolase C antibody [EPR19355] -Astrocyte Marker (ab200049)

Immunofluorescent analysis of 100% methanol-fixed U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) cells labeling Aldolase C + Aldolase with ab200049 at 1/500 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on U-87 MG cell line. The nuclear counter stain is DAPI (blue). Tubulin is detected with Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution (red).

The negative controls are as follows:

-ve control 1: ab200049 at 1/500 dilution followed by Goat Anti-Mouse IgG H&L (Alexa Fluor® 594) (ab150120) secondary antibody at 1/1000 dilution.

-ve control 2: Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution, followed by Goat Anti-Rabbit lgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.

ab200049 MERGED

DAPI —ve control 1 —ve control 2

Immunocytochemistry/ Immunofluorescence - Anti-Aldolase + Aldolase C antibody [EPR19355] -Astrocyte Marker (ab200049)

Immunofluorescent analysis of 100% methanol-fixed NIH/3T3 (Mouse embryonic fibroblast cell line) cells labeling Aldolase C + Aldolase with ab200049 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor<sup>®</sup> 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on NIH/3T3 cell line. The nuclear counter stain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor<sup>®</sup> 594) (ab150120) secondary antibody at 1/1000 dilution (red).

The negative controls are as follows:

-ve control 1: ab200049 at 1/500 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor<sup>®</sup> 594) (ab150120) secondary antibody at 1/1000 dilution.

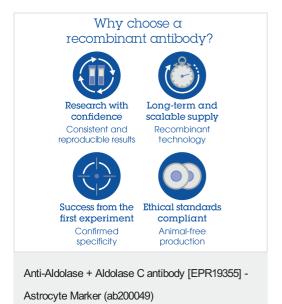
-ve control 2: Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000

dilution followed by Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.

ALDOC + ALDOA – Alexa Fluor® 488 (525/30 BP)

Flow Cytometry (Intracellular) - Anti-Aldolase +
Aldolase C antibody [EPR19355] - Astrocyte Marker (ab200049)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) cells labeling Aldolase + Aldolase Cwith ab200049 at 1/600 dilution (red) compared with a rabbit monoclonal lgG isotype control (ab172730; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit lgG (Alexa Fluorr<sup>®</sup> 488) at 1/500 dilution was used as the secondary antibody.



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