abcam

Product datasheet

Anti-Alanine Transaminase antibody [EPR19616] ab202083



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Overview

Product name Anti-Alanine Transaminase antibody [EPR19616]

Description Rabbit monoclonal [EPR19616] to Alanine Transaminase

Host species Rabbit

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

Species reactivity Reacts with: Mouse, Rat, Human

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

Positive control WB: Human fetal liver and fetal kidney lysates; Human skeletal muscle, Mouse muscle, Rat

muscle and Mouse liver lysates; HepG2 whole cell lysate; Mouse and rat brain and heart lysates.

ICC/IF: HepG2 and HT-29 cells. Flow Cyt (intra): HepG2 cells.

General notesThis 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

1

Clone number EPR19616

Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab202083 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.
WB		1/2000. Detects a band of approximately 55 kDa (predicted molecular weight: 55 kDa).
ICC/IF		1/100.

Target

Function Catalyzes the reversible transamination between alanine and 2-oxoglutarate to form pyruvate and

glutamate. Participates in cellular nitrogen metabolism and also in liver gluconeogenesis starting

with precursors transported from skeletal muscles.

Tissue specificityLiver, kidney, heart, and skeletal muscles. Expressed at moderate levels in the adipose tissue.

Pathway Amino-acid degradation; L-alanine degradation via transaminase pathway; pyruvate from L-

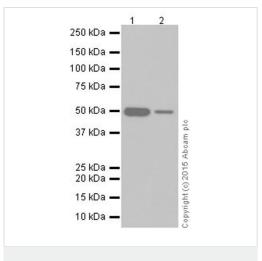
alanine: step 1/1.

Sequence similaritiesBelongs to the class-I pyridoxal-phosphate-dependent aminotransferase family. Alanine

aminotransferase subfamily.

Cellular localization Cytoplasm.

Images



Western blot - Anti-Alanine Transaminase antibody [EPR19616] (ab202083) **All lanes :** Anti-Alanine Transaminase antibody [EPR19616] (ab202083) at 1/2000 dilution

Lane 1 : Human fetal liver lysate

Lane 2 : Human fetal kidney lysate

Lysates/proteins at 10 µg per lane.

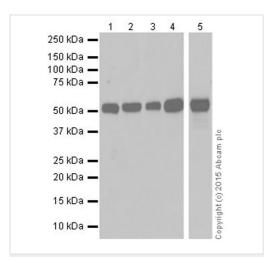
Secondary

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

Predicted band size: 55 kDa **Observed band size:** 55 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST..



Western blot - Anti-Alanine Transaminase antibody [EPR19616] (ab202083) **All lanes :** Anti-Alanine Transaminase antibody [EPR19616] (ab202083) at 1/2000 dilution

Lane 1: Human skeletal muscle lysate

Lane 2: HepG2 (Human liver hepatocellular carcinoma cell line)

whole cell lysate

Lane 3: Mouse muscle lysate

Lane 4: Rat muscle lysate

Lane 5: Mouse liver lysate

Lysates/proteins at 20 µg per lane.

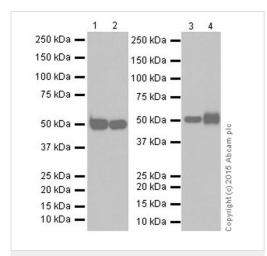
Secondary

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

Predicted band size: 55 kDa **Observed band size:** 55 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1, 2, 3 and 4: 3 minutes; Lane 5: 4 seconds.



Western blot - Anti-Alanine Transaminase antibody [EPR19616] (ab202083)

All lanes : Anti-Alanine Transaminase antibody [EPR19616] (ab202083) at 1/2000 dilution

Lane 1 : Mouse brain lysate
Lane 2 : Mouse heart lysate
Lane 3 : Rat brain lysate
Lane 4 : Rat heart lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 55 kDa **Observed band size:** 55 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1 and 2: 3 minutes; Lane 3 and 4: 30 seconds.

ab202083

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-ve control 1

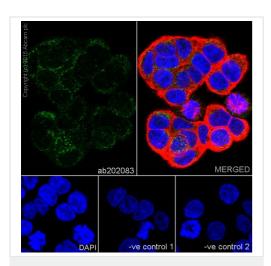
Immunocytochemistry/ Immunofluorescence - Anti-Alanine Transaminase antibody [EPR19616] (ab202083)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (Human liver hepatocellular carcinoma cell line) cells labeling Alanine Transaminase with ab202083 at 1/100 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on HepG2 cells. The nuclear counter stain 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).

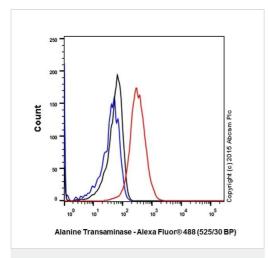
The negative controls are as follows:

-ve control 1: ab202083 at 1/100 dilution followed by <u>ab150120</u> at 1/1000 dilution.

-ve control 2: <u>ab7291</u> (anti-Tubulin mouse mAb) at 1/1000 dilution followed by <u>ab150077</u> at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-Alanine Transaminase antibody [EPR19616] (ab202083)



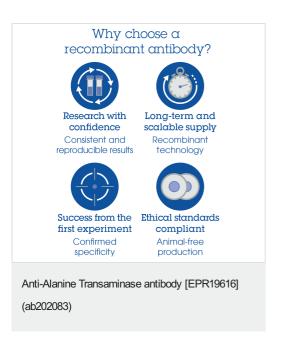
Flow Cytometry (Intracellular) - Anti-Alanine Transaminase antibody [EPR19616] (ab202083)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HT-29 (Human colorectal adenocarcinoma cell line) cells labeling Alanine Transaminase with ab202083 at 1/100 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on HT-29 cells. The nuclear counter stain 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: ab202083 at 1/100 dilution followed by $\underline{ab150120}$ at 1/1000 dilution.
- -ve control 2: <u>ab7291</u> at 1/1000 dilution followed by <u>ab150077</u> at 1/1000 dilution.

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed HepG2 (Human liver hepatocellular carcinoma cell line) cells labeling Alanine Transaminase with ab202083 at 1/70 dilution (red) compared with a Rabbit lgG,monoclonal- lsotype control (ab172730) (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody (blue). Goat anti rabbit lgG (Alexa Fluorr® 488) at 1/500 dilution was used as the secondary antibody.



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