Product datasheet

Anti-Alanine Transaminase antibody [EPR19616]  
ab202083

Overview

Product name  Anti-Alanine Transaminase antibody [EPR19616]
Description  Rabbit monoclonal [EPR19616] to Alanine Transaminase
Host species  Rabbit
Tested applications  Suitable for: WB, ICC/IF, Flow Cyt
Species reactivity  Reacts with: Mouse, Rat, Human
Immunogen  Recombinant fragment within Human Alanine Transaminase aa 250 to the C-terminus. The exact sequence is proprietary.  
Database link: P24298

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.  

General notes

Our RabMab® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab® patents

This product is a recombinant rabbit monoclonal antibody.

Properties

Form  Liquid
Storage buffer  Preservative: 0.01% Sodium azide  
Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity  Protein A purified
Clonality  Monoclonal
Clone number  EPR19616
Isotype

IgG

Applications

Our Abpromise guarantee 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.

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<td>WB</td>
<td>1/2000. Detects a band of approximately 55 kDa (predicted molecular weight: 55 kDa).</td>
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<td>ICC/IF</td>
<td>1/100.</td>
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<td>Flow Cyt</td>
<td>1/70.</td>
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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 specificity
Liver, 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 similarities
Belongs to the class-I pyridoxal-phosphate-dependent aminotransferase family. Alanine aminotransferase subfamily.

Cellular localization
Cytoplasm.

Images

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.

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.

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 IgG 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.

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 ab150120 at 1/1000 dilution.
-ve control 2: ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution followed by ab150077 at 1/1000 dilution.

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 ab150120 at 1/1000 dilution.
-ve control 2: ab7291 at 1/1000 dilution followed by ab150077 at 1/1000 dilution.
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 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.

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