

Product datasheet

Anti-SLC25A12 antibody [EPR16294] ab200201

KO VALIDATED Recombinant RabMAB

★★★★★ [1 Abreviews](#) [2 References](#) [7 Images](#)

Overview

Product name	Anti-SLC25A12 antibody [EPR16294]
Description	Rabbit monoclonal [EPR16294] to SLC25A12
Host species	Rabbit
Tested applications	Suitable for: IP, WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human fetal heart and skeletal muscle lysates; HeLa, A431 C6, RAW 264.7, PC-12 and NIH/3T3 whole cell lysates; Mouse and rat brain, heart and kidney lysates. IP: Jurkat whole cell lysate.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents.</p>

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	EPR16294

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab200201 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
IP		1/40.
WB	★★★★★ (1)	1/1000. Detects a band of approximately 75 kDa (predicted molecular weight: 75 kDa).

Target

Function

Calcium-dependent mitochondrial aspartate and glutamate carrier. May have a function in the urea cycle.

Tissue specificity

High levels in heart and skeletal muscle, low in brain and very low in kidney.

Involvement in disease

Defects in SLC25A12 are the cause of aspartate-glutamate carrier 1 deficiency (AGC1D) [MIM:612949]; also called global cerebral hypomyelination. This syndrome consists of a child severe psychomotor retardation, hypotonia and hypomyelination of the central nervous system.

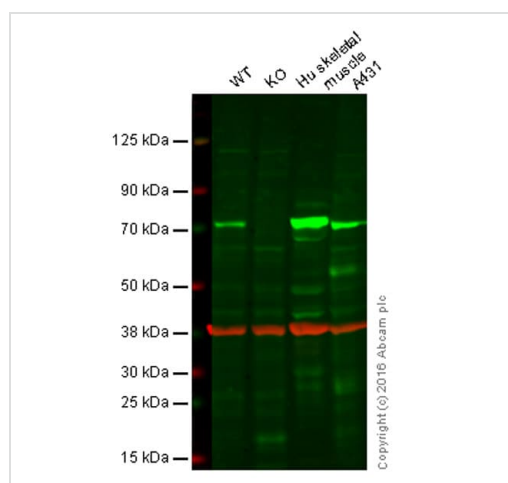
Sequence similarities

Belongs to the mitochondrial carrier family.
Contains 4 EF-hand domains.
Contains 3 Solcar repeats.

Cellular localization

Mitochondrion inner membrane.

Images



Western blot - Anti-SLC25A12 antibody [EPR16294] (ab200201)

Lane 1: Wild-type HAP1 cell lysate (20 µg)

Lane 2: SLC25A12 knockout HAP1 cell lysate (20 µg)

Lane 3: Human skeletal muscle lysate (20 µg)

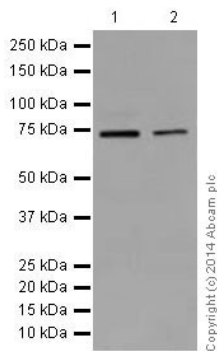
Lane 4: A431 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green

- ab200201 observed at 72 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab200201 was shown to recognize SLC25A12 when SLC25A12 knockout samples were used, along with additional cross-reactive bands. Wild-type and SLC25A12 knockout samples were subjected to SDS-PAGE. ab200201 and **ab8245** (loading control to GAPDH) were diluted to 1/1000 and 1/10000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed **ab216773**

and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed **ab216776** secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-SLC25A12 antibody [EPR16294] (ab200201)

All lanes : Anti-SLC25A12 antibody [EPR16294] (ab200201) at 1/5000 dilution

Lane 1 : Human fetal heart lysate

Lane 2 : Human skeletal muscle lysate

Lysates/proteins at 20 µg per lane.

Secondary

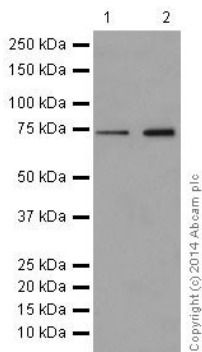
All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 75 kDa

Observed band size: 75 kDa

Exposure time: 10 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.



Western blot - Anti-SLC25A12 antibody [EPR16294] (ab200201)

All lanes : Anti-SLC25A12 antibody [EPR16294] (ab200201) at 1/1000 dilution

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

Lane 2 : A431 (Human epidermoid carcinoma) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

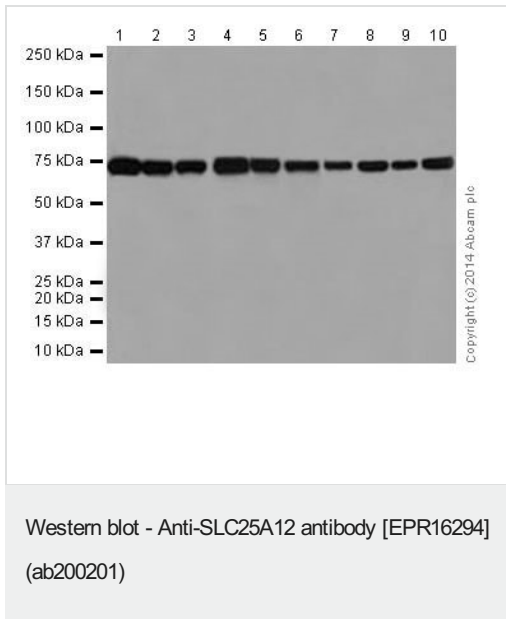
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 75 kDa

Observed band size: 75 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDm/TBST.



All lanes : Anti-SLC25A12 antibody [EPR16294] (ab200201) at 1/1000 dilution

Lane 1 : Mouse brain lysate

Lane 2 : Mouse heart lysate

Lane 3 : Mouse kidney lysate

Lane 4 : Rat brain lysate

Lane 5 : Rat heart lysate

Lane 6 : Rat kidney lysate

Lane 7 : C6 (Rat glial tumor cells) whole cell lysate

Lane 8 : RAW 264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus) whole cell lysate

Lane 9 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate

Lane 10 : NIH/3T3 (Mouse embryo fibroblast cells) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

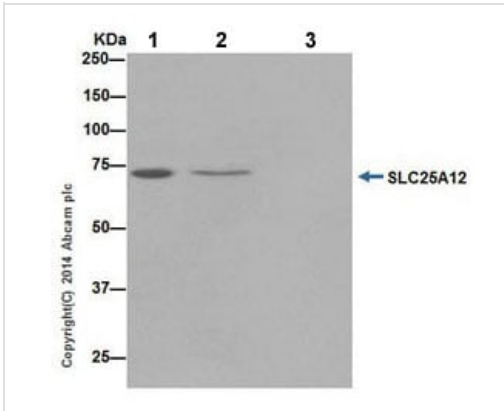
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 75 kDa

Observed band size: 75 kDa

Exposure time: 15 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.



Immunoprecipitation - Anti-SLC25A12 antibody
[EPR16294] (ab200201)

SLC25A12 was immunoprecipitated from 1mg of Jurkat (Human T cell leukemia cells from peripheral blood) whole cell lysate with ab200201 at 1/40 dilution.

Western blot was performed from the immunoprecipitate using ab200201 at 1/1000 dilution.

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG, was used as secondary antibody at 1/1500 dilution.

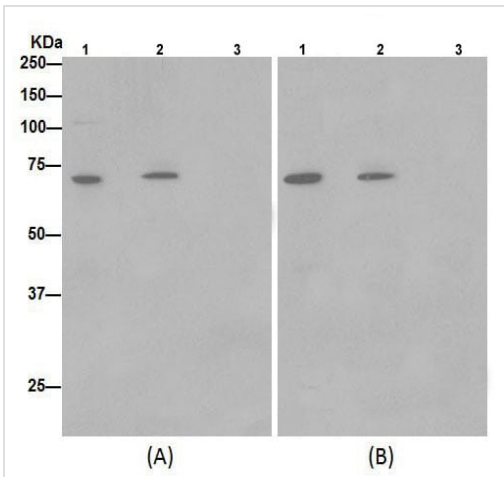
Lane 1: Jurkat whole cell lysate 10 µg (Input).

Lane 2: ab200201 IP in Jurkat whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab200201 in Jurkat whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 30 second.



Immunoprecipitation - Anti-SLC25A12 antibody
[EPR16294] (ab200201)

SLC25A12 was immunoprecipitated from 1mg of Jurkat (Human T cell leukemia cells from peripheral blood) whole cell lysate with ab200201 at 1/40 dilution.

Western blot was performed from the immunoprecipitate using ab200201 at 1/1000 dilution (Panel A) or **ab192244** at 1/1000 dilution (Panel B).

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG, was used as secondary antibody at 1/1500 dilution.

Lane 1: Jurkat whole cell lysate 10 µg (Input).

Lane 2: ab200201 IP in Jurkat whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab200201 in Jurkat whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time (Panel A and Panel B): 30 second.

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-SLC25A12 antibody [EPR16294] (ab200201)

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

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