abcam

Product datasheet

Anti-Serine racemase antibody [EPR16682] ab200833

Recombinant RabMAb

1 References 4 Images

Overview

Product name Anti-Serine racemase antibody [EPR16682]

Description Rabbit monoclonal [EPR16682] to Serine racemase

Host species Rabbit

Suitable for: WB, IP **Tested applications**

Unsuitable for: ICC/IF

Reacts with: Human Species reactivity

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: LNCaP, U-87 MG and HEK293 whole cell lysates; Human fetal brain lysate. IP: HEK293 and

LNCaP whole cell lysates.

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

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long Storage instructions

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 EPR16682

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab200833 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 37 kDa (predicted molecular weight: 37 kDa).
IP		1/50.

Application notes

Is unsuitable for ICC/IF.

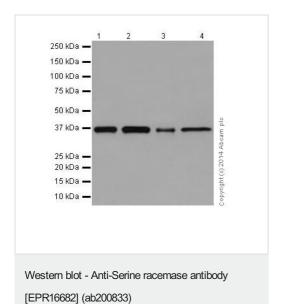
Target

Function	Catalyzes the synthesis of D-serine from L-serine. D-serine is a key coagonist with glutamate at NMDA receptors. Has dehydratase activity towards both L-serine and D-serine.
Tissue specificity	Brain: expressed at high levels in hippocampus and corpus callosum, intermediate levels in substantia nigra and caudate, and low levels in amygdala, thalamus, and subthalamic nuclei. Expressed in heart, skeletal muscle, kidney and liver.
Sequence similarities	Belongs to the serine/threonine dehydratase family.

Post-translational modifications

S-nitrosylated, leading to decrease the enzyme activity.

Images



All lanes : Anti-Serine racemase antibody [EPR16682] (ab200833) at 1/5000 dilution

Lane 1 : LNCaP (Human prostate cancer cell line) whole cell lysate

Lane 2: Human fetal brain tissue lysate

Lane 3 : U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) whole cell lysate

Lane 4: HEK-293 (Human embryonic kidney) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

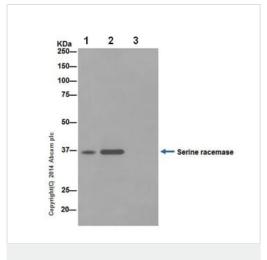
All lanes : Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 37 kDa

Observed band size: 37 kDa

Exposure time: 3 minutes

Blocking/Dilution Buffer: 5% NFDM/TBST.

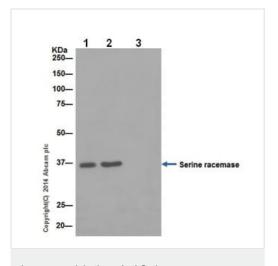


Immunoprecipitation - Anti-Serine racemase antibody [EPR16682] (ab200833)

Serine racemase was immunoprecipitated from 1mg of HEK293 (Human embryonic kidney) whole cell lysate with ab200833 at 1/50 dilution. Western blot was performed from the immunoprecipitate using ab200833 at 1/1000 dilution. Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG, was used as secondary antibody at 1/1500 dilution.

Lane 1: HEK293 whole cell lysate 10 μ g (Input). Lane 2: ab200833 IP in HEK293 whole cell lysate. Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab200833 in HEK293 whole cell lysate. Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 30 seconds

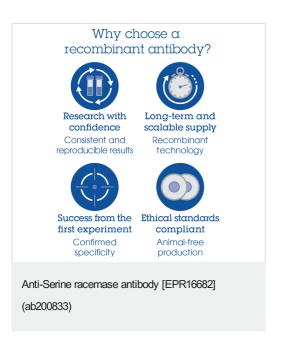


Immunoprecipitation - Anti-Serine racemase antibody [EPR16682] (ab200833)

Serine racemase was immunoprecipitated from 1mg of LNCaP (Human prostate cancer cell line) whole cell lysate with ab200833 at 1/50 dilution. Western blot was performed from the immunoprecipitate using ab200833 at 1/1000 dilution. Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG, was used as secondary antibody at 1/1500 dilution.

Lane 1: LNCaP whole cell lysate 10 μ g (Input). Lane 2: ab200833 IP in LNCaP whole cell lysate. Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab200833 in LNCaP whole cell lysate. Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 10 seconds



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