abcam

Product datasheet

Anti-SIK3 antibody [EPR20880-249] ab227044

Recombinant RabMAb

6 Images

Overview

Product name Anti-SIK3 antibody [EPR20880-249]

Description Rabbit monoclonal [EPR20880-249] to SIK3

Host species Rabbit

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

Unsuitable for: IHC-P or IP

Species reactivity Reacts with: Mouse, Rat, Human

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

Positive control WB: N41 transfected with scrambled siRNA control, SIK3 knockdown N41 and Neuro-2a whole

cell lysate; Mouse hippocampus, Rat brain, Rat hippocampus, Human hippocampus, Rat liver and

Mouse cortex tissue lysate. ICC/IF: Neuro-2a cells. Flow Cyt: Neuro-2a 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® 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: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal

Clone number EPR20880-249

Isotype IgG1

Applications

The Abpromise guarantee Our Abpromise

Our <u>Abpromise guarantee</u> covers the use of ab227044 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		1/1000. Predicted molecular weight: 140 kDa.
ICC/IF		1/50.
Flow Cyt		1/500.

Application notes

Is unsuitable for IHC-P or IP.

Target

Sequence similaritiesBelongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. SNF1 subfamily.

Contains 1 protein kinase domain.

Contains 1 UBA domain.

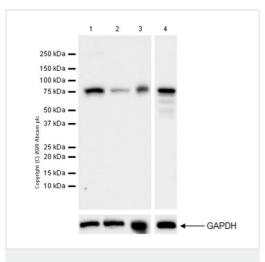
Post-translational modifications

Phosphorylated at Thr-163 by STK11/LKB1 in complex with STE20-related adapter-alpha

(STRADA) pseudo kinase and CAB39.

Cellular localization Cytoplasm. Locates to punctate structures within the cytoplasm on binding to YWHAZ.

Images



Western blot - Anti-SIK3 antibody [EPR20880-249] (ab227044)

All lanes : Anti-SIK3 antibody [EPR20880-249] (ab227044) at 1/1000 dilution

Lane 1 : N41 (Embryonic Mouse Hypothalamus Cell Line) transfected with scrambled siRNA control whole cell lysate

Lane 2: SIK3 knockdown N41 whole cell lysate

Lane 3: Mouse hippocampus tissue lysate

Lane 4: Rat brain tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

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

1/100000 dilution

Predicted band size: 140 kDa **Observed band size:** 70 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

The control and SIK3 knockdown cell lysates were kindly provided by an anonymous collaborator.

Exposure time: Lanes 1-3: 26 seconds; Lane 4: 15 seconds.



Western blot - Anti-SIK3 antibody [EPR20880-249] (ab227044)

All lanes : Anti-SIK3 antibody [EPR20880-249] (ab227044) at 1/1000 dilution

Lane 1: Rat hippocampus tissue lysate

Lane 2: Human hippocampus tissue lysate

Lane 3: Rat liver tissue lysate

Lane 4: Neuro-2a (mouse neuroblastoma neuroblast) whole cell

lysate

Lysates/proteins at 20 µg per lane.

Secondary

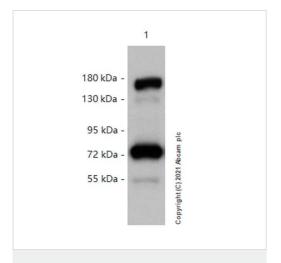
All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000

dilution

Predicted band size: 140 kDa **Observed band size:** 70 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Exposure time: Lane 1: 3 seconds; Lanes 2-4: 8 seconds.



Western blot - Anti-SIK3 antibody [EPR20880-249] (ab227044)

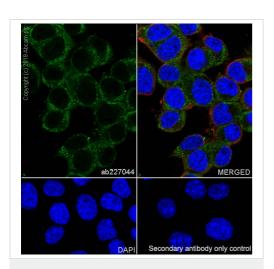
Anti-SIK3 antibody [EPR20880-249] (ab227044) at 0.789 μ g/ml + Mouse cortex tissue lysate at 4 μ g

Predicted band size: 140 kDa **Observed band size:** 150,70 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

Data was kindly provided by Dr. Qinghua Liu, NIBS.

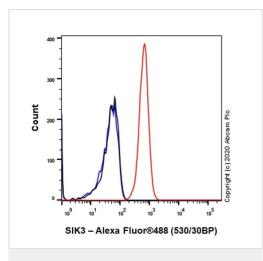
The 1st Ab working concentration was 5 ug/ml.



Immunocytochemistry/ Immunofluorescence - Anti-SIK3 antibody [EPR20880-249] (ab227044)

Immunocytochemical analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized Neuro-2a cells labelling SIK3 with ab227044 at 1/50 (15.78 ug/ml) dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in Neuro-2a cells. Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) (**ab195889**) was used to counterstain tubulin at 1/200 (2.5 ug/ml) dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) (ab150077) at 1/1000 dilution.



Flow Cytometry - Anti-SIK3 antibody [EPR20880-249] (ab227044)

Flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized Neuro-2a (mouse neuroblastoma neuroblast) cells labelling SIK3 with ab227044 at 1/500 dilution (0.1ug) (Red) compared with a Rabbit monoclonal IgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488) (ab150077) at 1/2000 dilution was used as the secondary antibody.



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