abcam

Product datasheet

Anti-SRPK2 antibody [EPR16366] - BSA and Azide free ab251113



7 Images

Overview

Product name Anti-SRPK2 antibody [EPR16366] - BSA and Azide free

Description Rabbit monoclonal [EPR16366] to SRPK2 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB, IHC-P, ICC/IF

Species reactivity Reacts with: Mouse, Human

Predicted to work with: Rat

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

General notes ab251113 is the carrier-free version of ab192238.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Clonality Monoclonal
Clone number EPR16366

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab251113 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		Use at an assay dependent concentration. Detects a band of approximately 115 kDa (predicted molecular weight: 115 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		Use at an assay dependent concentration.

Target

Function

Serine/arginine-rich protein-specific kinase which specifically phosphorylates its substrates at serine residues located in regions rich in arginine/serine dipeptides, known as RS domains and is involved in the phosphorylation of SR splicing factors and the regulation of splicing. Promotes neuronal apoptosis by up-regulating cyclin-D1 (CCND1) expression. This is done by the phosphorylation of SRSF2, leading to the suppression of p53/TP53 phosphorylation thereby relieving the repressive effect of p53/TP53 on cyclin-D1 (CCND1) expression. Phosphorylates ACIN1, and redistributes it from the nuclear speckles to the nucleoplasm, resulting in cyclin A1 but not cyclin A2 up-regulation. Plays an essential role in spliceosomal B complex formation via the phosphorylation of DDX23/PRP28. Can mediate hepatitis B virus (HBV) core protein phosphorylation. Plays a negative role in the regulation of HBV replication through a mechanism not involving the phosphorylation of the core protein but by reducing the packaging efficiency of the pregenomic RNA (pgRNA) without affecting the formation of the viral core particles.

Tissue specificity

 $\label{thm:equiv} \mbox{Highly expressed in brain, moderately expressed in heart and skeletal muscle and at low levels in}$

lung, liver, and kidney.

Sequence similarities

Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family.

Contains 1 protein kinase domain.

Post-translational modifications

Phosphorylation at Thr-492 by PKB/AKT1 enhances its stimulatory activity in triggering cyclin-D1 (CCND1) expression and promoting apoptosis in neurons, which can be blocked by YWHAB. It

also enhances its protein kinase activity toward ACIN1 and SRSF2, promotes its nuclear translocation and prevents its proteolytic cleavage.

Proteolytically cleaved at Asp-139 and Asp-403 by caspase-3 during apoptotic cell death. Cleavage at Asp-139 which is the major site of cleavage, produces a small N-terminal fragment that translocates into nucleus and promotes VP16-induced apoptosis.

Cellular localization

Cytoplasm. Nucleus. Shuttles between the nucleus and the cytoplasm. KAT5/TIP60 inhibits its nuclear translocation. Phosphorylation at Thr-492 by PKB/AKT1 promotes nuclear translocation.

Images



Western blot - Anti-SRPK2 antibody [EPR16366] - BSA and Azide free (ab251113)

All lanes : Anti-SRPK2 antibody [EPR16366] - N-terminal (ab192238) at 1/1000 dilution

Lane 1 : HepG2 cell lysate

Lane 2 : HeLa cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 115 kDa

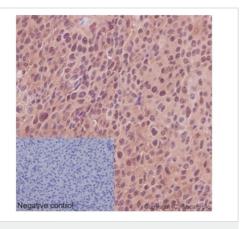
This data was developed using <u>ab192238</u>, the same antibody clone in a different buffer formulation.

ab192238 MERGED

Immunocytochemistry/ Immunofluorescence - Anti-SRPK2 antibody [EPR16366] - BSA and Azide free (ab251113) This data was developed using <u>ab192238</u>, the same antibody clone in a different buffer formulation.

Immunofluorescent analysis of Neuro-2a cells (4% Paraformaldehyde-fixed, 0.1% tritonX-100 permeabilized) labeling SRPK2 with <u>ab192238</u> at 1/250 dilution (5.4 µg/mL) followed by Goat anti rabbit lgG (AlexaFluor® 488) (<u>ab150077</u>) secondary at 1/200 dilution and counter-stained with DAPI (blue).

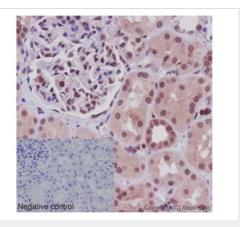
Negative controls: anti-SRPK2 at 1/250 dilution, Secondary ab (Goat anti mouse lgG (Alexa Fluor®594)) at 1/500 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SRPK2 antibody

[EPR16366] - BSA and Azide free (ab251113)

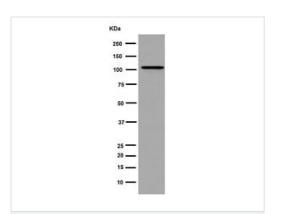
This data was developed using <u>ab192238</u>, the same antibody clone in a different buffer formulation.Immunohistochemical analysis of paraffin-embedded Human endometrium adenocarcinoma tissue labeling SRPK2 with <u>ab192238</u> at 1/100 dilution followed by prediluted HRP Polymer for Rabbit/Mouse IgG secondary antibody and counter-stained with Hematoxylin. (inset: negative control). Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SRPK2 antibody

[EPR16366] - BSA and Azide free (ab251113)

This data was developed using <u>ab192238</u>, the same antibody clone in a different buffer formulation.Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling SRPK2 with <u>ab192238</u> at 1/100 dilution followed by pre-diluted HRP Polymer for Rabbit/Mouse IgG secondary antibody and counter-stained with Hematoxylin. (inset: negative control). Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-SRPK2 antibody [EPR16366] - BSA and Azide free (ab251113)

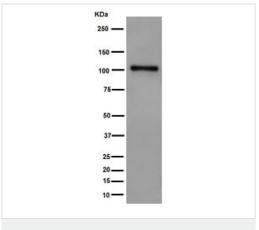
Anti-SRPK2 antibody [EPR16366] - N-terminal ($\underline{ab192238}$) at 1/1000 dilution + Human fetal kidney tissue lysate at 10 μg

Secondary

Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/1000 dilution

Predicted band size: 115 kDa

This data was developed using <u>ab192238</u>, the same antibody clone in a different buffer formulation.



Western blot - Anti-SRPK2 antibody [EPR16366] - BSA and Azide free (ab251113)

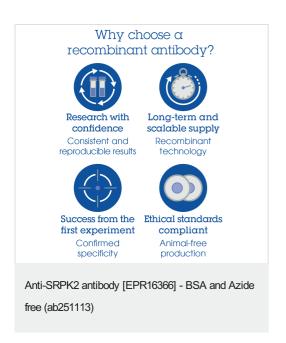
Anti-SRPK2 antibody [EPR16366] - N-terminal (ab192238) at 1/2000 dilution + Human fetal brain lysate at 20 μg

Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugate at 1/1000 dilution

Predicted band size: 115 kDa

This data was developed using <u>ab192238</u>, the same antibody clone in a different buffer formulation.



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