

Product datasheet

Anti-SPAK antibody [EPR6394] ab128894

KO **VALIDATED** Recombinant RabMAb

★★★★☆ 1 Abreviews 1 References 4 Images

Overview

Product name	Anti-SPAK antibody [EPR6394]
Description	Rabbit monoclonal [EPR6394] to SPAK
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, Flow Cyt Unsuitable for: ICC or IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide corresponding to Human SPAK aa 400-500. Database link: Q9UEW8
Positive control	SH-SY5Y, 293T, Jurkat, BxPC3 and HepG2 whole cell lysate (ab7900); Human colon tissue
General notes	Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

This product was previously labelled as STK39

This product is a recombinant monoclonal antibody, which offers several advantages including:

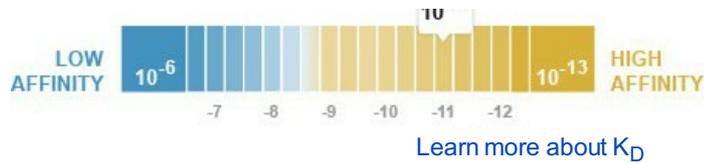
- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

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 -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K _D = 3.10 x 10 ⁻¹¹ M



Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 40% Glycerol, 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR6394
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab128894** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

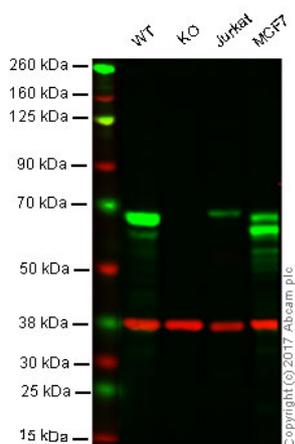
Application	Abreviews	Notes
WB	★★★★☆	1/1000 - 1/10000. Detects a band of approximately 65 kDa (predicted molecular weight: 59 kDa).
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
Flow Cyt		1/10 - 1/100. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Application notes Is unsuitable for ICC or IP.

Target

Function	May act as a mediator of stress-activated signals.
Tissue specificity	Predominantly expressed in brain and pancreas followed by heart, lung, kidney, skeletal muscle, liver, placenta and testis.
Sequence similarities	Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. STE20 subfamily. Contains 1 protein kinase domain.
Domain	PAPA box (proline-alanine repeats) may target the kinase to a specific subcellular location by facilitating interaction with intracellular proteins such as actin or actin-like proteins.
Cellular localization	Cytoplasm. Nucleus. Nucleus when caspase-cleaved.

Images

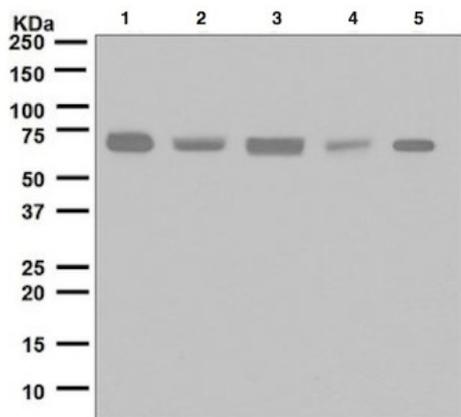


Western blot - Anti-SPAK antibody [EPR6394]
(ab128894)

- Lane 1:** Wild-type HAP1 whole cell lysate (20 µg)
- Lane 2:** SPAK knockout HAP1 whole cell lysate (20 µg)
- Lane 3:** Jurkat whole cell lysate (20 µg)
- Lane 4:** MCF7 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab128894 observed at 70 kDa. Red - loading control, [ab8245](#), observed at 37 kDa.

ab128894 was shown to specifically react with SPAK in wild-type HAP1 cells along with additional cross-reactive bands. No band was observed when SPAK knockout samples were examined. Wild-type and SPAK knockout samples were subjected to SDS-PAGE. Ab128894 and [ab8245](#) (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/10,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed [ab216773](#) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed [ab216776](#) secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-SPAK antibody [EPR6394]
(ab128894)

All lanes : Anti-SPAK antibody [EPR6394] (ab128894) at 1/1000 dilution

- Lane 1 :** SH-SY5Y cell lysate
- Lane 2 :** 293T cell lysate
- Lane 3 :** Jurkat cell lysate
- Lane 4 :** BxPC3 cell lysate
- Lane 5 :** HepG2 cell lysate

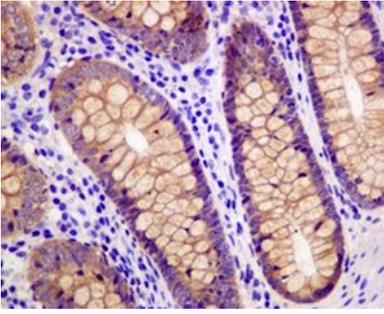
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP labelled goat anti-rabbit IgG at 1/2000 dilution

Predicted band size: 59 kDa

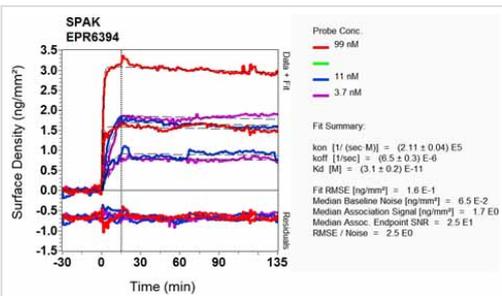
Observed band size: 65 kDa [why is the actual band size different from the predicted?](#)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SPAK antibody [EPR6394] (ab128894)

ab128894, at 1/50 dilution, staining SPAK in paraffin embedded Human colon tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Other - Anti-SPAK antibody [EPR6394] (ab128894)

Equilibrium dissociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors