

Product datasheet

Anti-PBK/SPK antibody [EP2520Y] α b75987

KO VALIDATED

Recombinant

RabMAb

[8 References](#) [4 Images](#)

Overview

Product name	Anti-PBK/SPK antibody [EP2520Y]
Description	Rabbit monoclonal [EP2520Y] to PBK/SPK
Host species	Rabbit
Tested applications	Suitable for: WB, IP, IHC-P Unsuitable for: Flow Cyt or ICC/IF
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide within Human PBK/SPK (C terminal). The exact sequence is proprietary.
Positive control	WB: HEK-293T, HeLa and HAP1 cell lysates. IHC-P: Human tonsil tissue
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> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal

Clone number EP2520Y
Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab75987 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		1/100000 - 1/500000. Detects a band of approximately 36 kDa (predicted molecular weight: 36 kDa).
IP		1/30.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Antigen retrieval is recommended.

Application notes Is unsuitable for Flow Cyt or ICC/IF.

Target

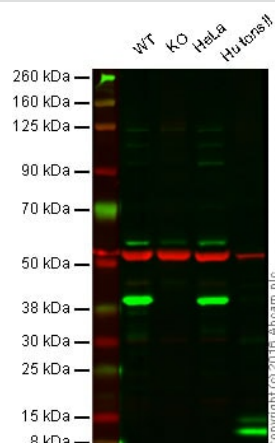
Function Phosphorylates MAP kinase p38. Seems to be active only in mitosis. May also play a role in the activation of lymphoid cells. When phosphorylated, forms a complex with TP53, leading to TP53 destabilization and attenuation of G2/M checkpoint during doxorubicin-induced DNA damage.

Tissue specificity Expressed in the testis and placenta. In the testis, restrictedly expressed in outer cell layer of seminiferous tubules.

Sequence similarities Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. MAP kinase kinase subfamily.
Contains 1 protein kinase domain.

Post-translational modifications Phosphorylated; in a cell-cycle dependent manner at mitosis.

Images



Western blot - Anti-PBK/SPK antibody [EP2520Y]
(ab75987)

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

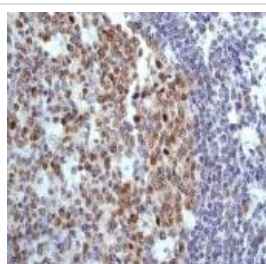
Lane 2: PBK knockout HAP1 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

Lane 4: Human tonsil tissue lysate (20 µg)

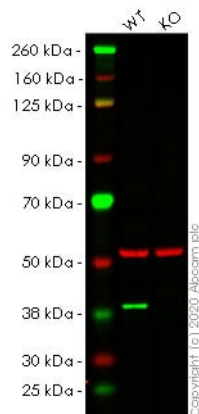
Lanes 1 - 4: Merged signal (red and green). Green - ab75987 observed at 40 kDa. Red - loading control, **ab7291**, observed at 52 kDa.

ab75987 was shown to recognize PBK when PBK knockout samples were used, along with additional cross-reactive bands. Wild-type and PBK knockout samples were subjected to SDS-PAGE. ab75987 diluted to 1/100,000 and **ab7291** (loading control to alpha Tubulin) diluted to 1/10,000 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 1/10,000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PBK/SPK antibody [EP2520Y] (ab75987)

Immunohistochemical analysis of paraffin-embedded human tonsil using ab75987 at 1/100 dilution. Antigen retrieval was heat mediated with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-PBK/SPK antibody [EP2520Y] (ab75987)

All lanes : Anti-PBK/SPK antibody [EP2520Y] (ab75987) at 1/100000 dilution

Lane 1 : Wild-type HEK-293T cell lysate

Lane 2 : PBK knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 36 kDa

Observed band size: 40 kDa

Lanes 1-2: Merged signal (red and green). Green - ab75987 observed at 40 kDa. Red - Anti-alpha Tubulin antibody [DM1A] - Loading Control ([ab7291](#)) observed at 50 kDa.

ab75987 was shown to react with PBK/SPK in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout cell line [ab266827](#) (knockout cell lysate [ab257575](#)) was used. Wild-type HEK-293T and PBK knockout HEK-293T cell lysates were subjected to SDS-PAGE. ab75987 and Anti-alpha Tubulin antibody [DM1A] - Loading Control ([ab7291](#)) overnight at 4°C at a 1 in 100000 dilution and a 1 in 20000 dilution respectively. 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 in 20000 dilution for 1 hour at room temperature before imaging.

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-PBK/SPK antibody [EP2520Y] (ab75987)

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

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