


## Product datasheet

# Anti-PBK/SPK (phospho T9) antibody [EPR2475(N)] ab184953

Recombinant RabMAb

[1 References](#) [6 Images](#)

### Overview

<b>Product name</b>	Anti-PBK/SPK (phospho T9) antibody [EPR2475(N)]
<b>Description</b>	Rabbit monoclonal [EPR2475(N)] to PBK/SPK (phospho T9)
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), IHC-P, WB
<b>Species reactivity</b>	<b>Reacts with:</b> Rat, Human <b>Predicted to work with:</b> Mouse 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: HeLa cells/lysate treated with Nocodazole. IHC-P: Human testis and rat spleen tissues. Flow Cyt (intra): HeLa cells.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 59% PBS, 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

**Clone number**                      EPR2475(N)

**Isotype**                                IgG

## Applications

**The Abpromise guarantee**            Our **Abpromise guarantee** covers the use of ab184953 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
<b>Flow Cyt (Intra)</b>		1/800. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
<b>IHC-P</b>		1/50 - 1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
<b>WB</b>		1/1000 - 1/10000. Detects a band of approximately 40 kDa (predicted molecular weight: 36 kDa).

## Target

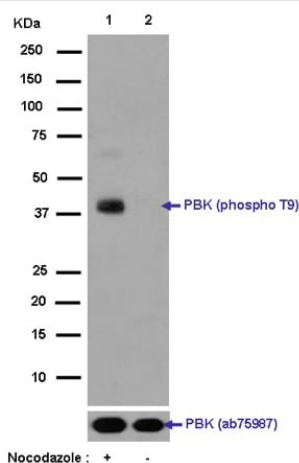
**Function**                                      Phosphorylates MAP kinase p38. Seems to be active only in mitosis. May also play a role in the activation of lymphoid cells. When phosphorylated, forms a complex with TP53, leading to TP53 destabilization and attenuation of G2/M checkpoint during doxorubicin-induced 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 (phospho T9) antibody [EPR2475(N)] (ab184953)

**All lanes :** Anti-PBK/SPK (phospho T9) antibody [EPR2475(N)] (ab184953) at 1/5000 dilution

**Lane 1 :** HeLa cell lysate treated with Nocodazole

**Lane 2 :** HeLa cell lysate untreated

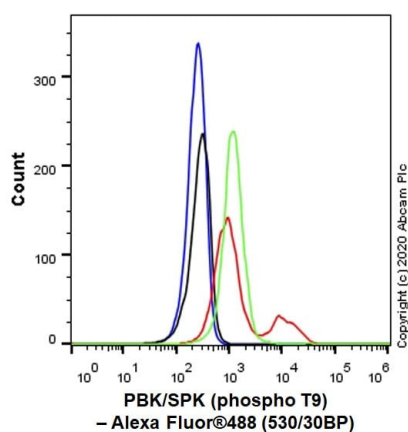
Lysates/proteins at 10 µg per lane.

### Secondary

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

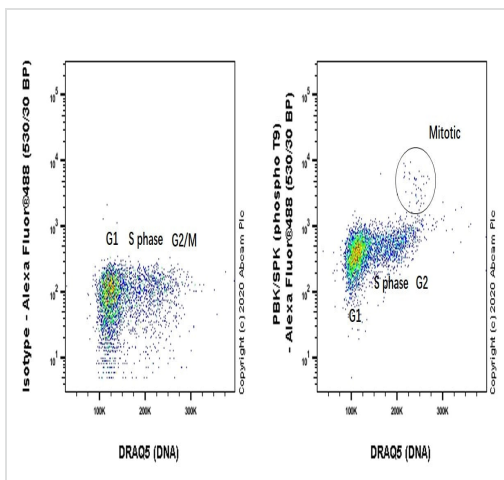
**Predicted band size:** 36 kDa

**Observed band size:** 40 kDa



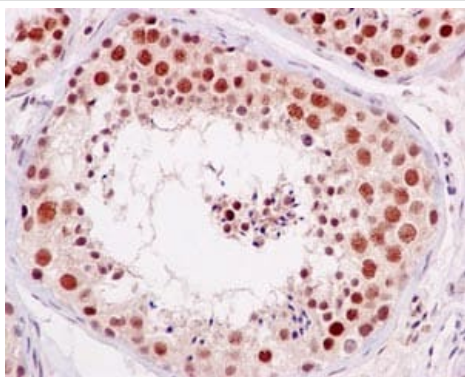
Flow Cytometry (Intracellular) - Anti-PBK/SPK (phospho T9) antibody [EPR2475(N)] (ab184953)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilised HeLa (Human cervix adenocarcinoma epithelial cell) treated with 0.1 µg/mL Nocodazole for 24h (Red) / Untreated control (Green) cells labeling PBK/SPK (phospho T9) with ab184953 at 1/800 dilution compared with a Isotype control Rabbit monoclonal IgG (**ab172730**) (Black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**), at 1/2000 dilution was used as the secondary antibody. Higher expression in part of Nocodazole treated samples (mitotic cell induction) which is consistent with cell cycle Flow Cytometry data.



Flow Cytometry (Intracellular) - Anti-PBK/SPK (phospho T9) antibody [EPR2475(N)] (ab184953)

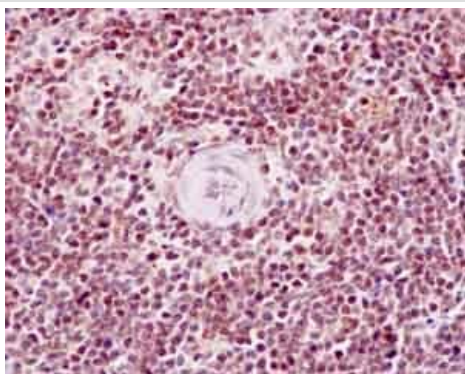
Intracellular flow cytometric analysis of 4% paraformaldehyde fixed HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling PBK/SPK (phospho T9) with ab184953 at 1/800 dilution (Right) compared with a Rabbit monoclonal IgG Isotype control (**ab172730**) (Left). Cells permeabilised with 90% methanol. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**), at 1/2000 dilution was used as the secondary antibody. Highest expression at M phase.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PBK/SPK (phospho T9) antibody [EPR2475(N)] (ab184953)

Immunohistochemical analysis of paraffin-embedded human testis tissue labeling PBK/SPK (phospho T9) with ab184953 at 1/100 dilution followed by prediluted HRP Polymer for Rabbit IgG. Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PBK/SPK (phospho T9) antibody [EPR2475(N)] (ab184953)

Immunohistochemical analysis of paraffin-embedded rat spleen tissue labeling PBK/SPK (phospho T9) with ab184953 at 1/100 dilution followed by prediluted HRP Polymer for Rabbit IgG. Counter stained with Hematoxylin

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.

### 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 (phospho T9) antibody [EPR2475(N)]  
(ab184953)

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

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