


## Product datasheet

# Anti-TPK1 antibody [EPR10918] - BSA and Azide free ab249546

Recombinant RabMAb

6 Images

### Overview

<b>Product name</b>	Anti-TPK1 antibody [EPR10918] - BSA and Azide free
<b>Description</b>	Rabbit monoclonal [EPR10918] to TPK1 - BSA and Azide free
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, IP, WB <b>Unsuitable for:</b> Flow Cyt or ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human <b>Predicted to work with:</b> Cow 
<b>Immunogen</b>	Synthetic peptide within Human TPK1 aa 200 to the C-terminus (Cysteine residue). The exact sequence is proprietary. Database link: <a href="#">Q9H3S4</a>
<b>General notes</b>	<p>Ab249546 is the carrier-free version of <a href="#">ab170863</a>. This format is designed for use in antibody labeling, including fluorochromes, metal isotopes, oligonucleotides, enzymes.</p> <p>Our <a href="#">carrier-free formats</a> are supplied in a buffer free of BSA, sodium azide and glycerol for higher conjugation efficiency.</p> <p>Use our <a href="#">conjugation kits</a> for antibody conjugates that are ready-to-use in as little as 20 minutes with &lt;1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.</p> <p>ab249546 is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm.</p> <p><i>Maxpar® is a trademark of Fluidigm Canada Inc.</i></p> <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® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb® patents</a>.</p>

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

## Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C. Do Not Freeze.
<b>Storage buffer</b>	pH: 7.2 Constituent: PBS
<b>Carrier free</b>	Yes
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR10918
<b>Isotype</b>	IgG

## Applications

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Our [Abpromise guarantee](#) covers the use of **ab249546** 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
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 27 kDa.

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**Application notes**

Is unsuitable for Flow Cyt or ICC/IF.

**Target****Function**

Catalyzes the phosphorylation of thiamine to thiamine pyrophosphate. Can also catalyze the phosphorylation of pyrithiamine to pyrithiamine pyrophosphate.

**Tissue specificity**

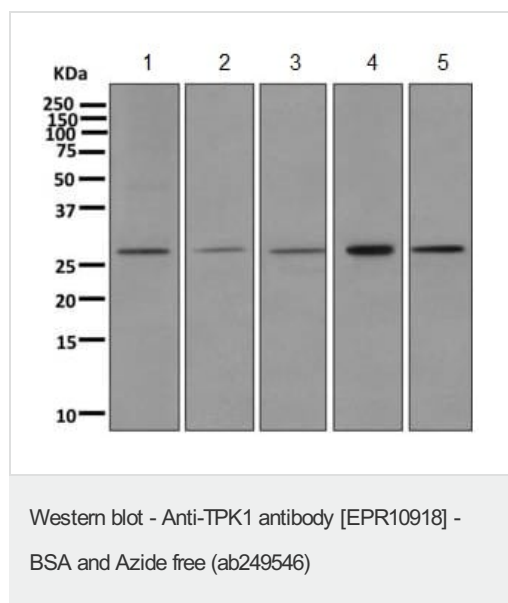
Detected in heart, kidney, testis, small intestine and peripheral blood leukocytes, and at very low levels in a variety of tissues.

**Pathway**

Cofactor biosynthesis; thiamine diphosphate biosynthesis; thiamine diphosphate from thiamine: step 1/1.

**Sequence similarities**

Belongs to the thiamine pyrophosphokinase family.

**Images**

**All lanes** : Anti-TPK1 antibody [EPR10918] ([ab170863](#)) at 1/1000 dilution

**Lane 1** : SH-SY5Y cell lysate

**Lane 2** : JAR cell lysate

**Lane 3** : Fetal kidney tissue lysate

**Lane 4** : Fetal brain tissue lysate

**Lane 5** : Fetal lung tissue lysate

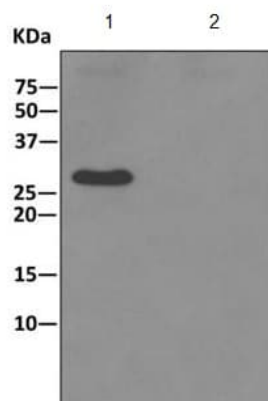
Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes** : Goat anti-rabbit HRP-conjugated at 1/2000 dilution

**Predicted band size:** 27 kDa

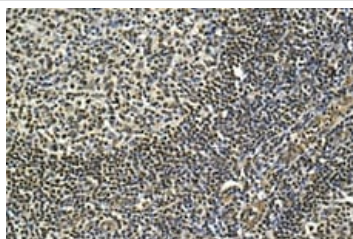
This data was developed using [ab170863](#), the same antibody clone in a different buffer formulation.



Immunoprecipitation - Anti-TPK1 antibody  
[EPR10918] - BSA and Azide free (ab249546)

This data was developed using [ab170863](#), the same antibody clone in a different buffer formulation.

Western blot analysis on immunoprecipitation pellet from (Lane 1) fetal brain lysate or (Lane 2) 1X PBS (negative control) using [ab170863](#) at a 1/10 dilution and HRP-conjugated anti-rabbit IgG preferentially detecting the non-reduced form of rabbit IgG.

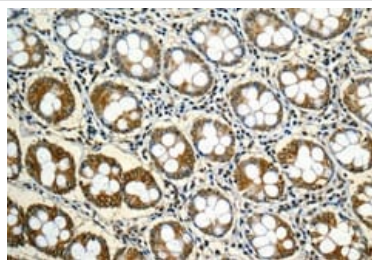


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TPK1 antibody  
[EPR10918] - BSA and Azide free (ab249546)

This data was developed using [ab170863](#), the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of Formalin/PFA-fixed paraffin-embedded Human tonsil tissue labeling TPK1 with [ab170863](#) at a 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

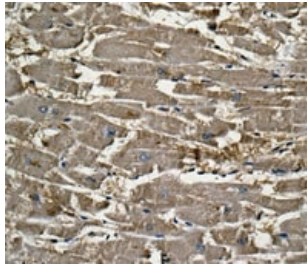


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TPK1 antibody  
[EPR10918] - BSA and Azide free (ab249546)

This data was developed using [ab170863](#), the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of Formalin/PFA-fixed paraffin-embedded Human kidney tissue labeling TPK1 with [ab170863](#) at a 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TPK1 antibody [EPR10918] - BSA and Azide free (ab249546)

This data was developed using [ab170863](#), the same antibody clone in a different buffer formulation.

Immunohistochemical analysis of Formalin/PFA-fixed paraffin-embedded Human heart tissue labeling TPK1 with [ab170863](#) at a 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

### Why choose a recombinant antibody?



Anti-TPK1 antibody [EPR10918] - BSA and Azide free (ab249546)

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

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