

## Product datasheet

# Anti-PDPK1 (phospho S393) antibody [EPR19818] ab206340

Recombinant RabMAb

★★★★★ 1 Abreviews 1 References 5 Images

### Overview

<b>Product name</b>	Anti-PDPK1 (phospho S393) antibody [EPR19818]
<b>Description</b>	Rabbit monoclonal [EPR19818] to PDPK1 (phospho S393)
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP, Dot blot
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide within Human PDPK1 aa 350-450 (phospho S393). The exact sequence is proprietary. Database link: <a href="#">O15530</a>
<b>Positive control</b>	WB: HEK-293T whole cell lysate transfected with PDPK1 (WT). IP: HEK-293T whole cell lysate transfected with PDPK1 (WT).
<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> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications &amp; species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise<sup>™</sup> guarantee.</p> <p>In preparation for this, we have started to update the applications &amp; species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications &amp; species that this product has been "predicted to work</p>

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

<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: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR19818
<b>Isotype</b>	IgG

## Applications

Our [Abpromise guarantee](#) covers the use of **ab206340** 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. Detects a band of approximately 63 kDa (predicted molecular weight: 63 kDa).
IP		1/40.
Dot blot		1/1000.

## Target

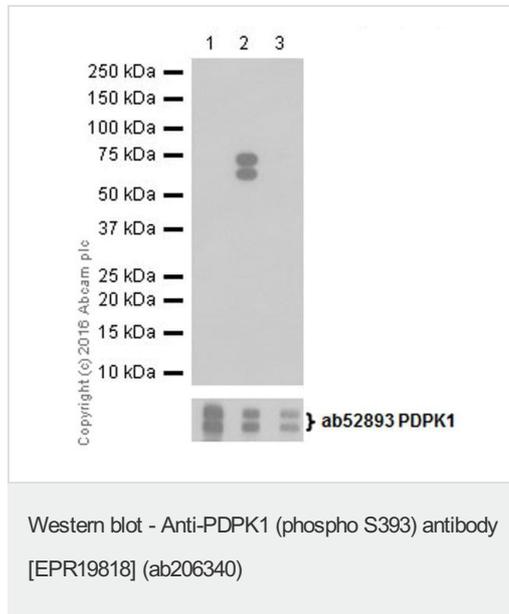
<b>Function</b>	Phosphorylates and activates not only PKB/AKT, but also PKA, PKC-zeta, RPS6KA1 and RPS6KB1. May play a general role in signaling processes and in development (By similarity). Isoform 3 is catalytically inactive.
<b>Tissue specificity</b>	Appears to be expressed ubiquitously.
<b>Sequence similarities</b>	Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PDK1 subfamily. Contains 1 PH domain. Contains 1 protein kinase domain.
<b>Post-translational modifications</b>	Phosphorylated on tyrosine and serine/threonine. Phosphorylation on Ser-241 in the activation loop is required for full activity. PDK1 itself can autophosphorylate Ser-241, leading to its own

activation.

## Cellular localization

Cytoplasm. Membrane. Membrane-associated after cell stimulation leading to its translocation.  
Tyrosine phosphorylation seems to occur only at the plasma membrane.

## Images



**All lanes :** Anti-PDPK1 (phospho S393) antibody [EPR19818] (ab206340) at 1/5000 dilution

**Lane 1 :** HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate transfected with PDPK1 S393A mutant

**Lane 2 :** HEK-293T whole cell lysate transfected with PDPK1 (WT)

**Lane 3 :** HEK-293T whole cell lysate transfected with PDPK1 (WT), then treated with alkaline phosphatase for 1 hour

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

**Predicted band size:** 63 kDa

**Observed band size:** 60,63 kDa

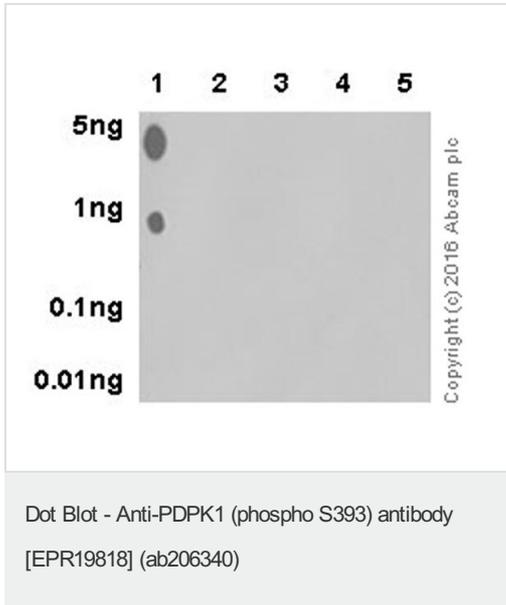
[why is the actual band size different from the predicted?](#)

**Exposure time:** 3 minutes

Blocking/Dilution buffer: 5% NFDm/TBST.

These plasmids were kindly provided by our collaborator Dr. Yi Rao, Peking University.

Based on sequence alignment, the antigen can recognize 5 isoforms, the predicted MW are 63kDa, 58 kDa, 60 kDa, 48 kDa and 51kDa, respectively.



Dot blot analysis of PDPK1 (phospho S393) labeled with ab206340 at 1/1000 dilution.

Lane 1: PDPK1 (phospho S393) peptide(aa391-401)

Lane 2: PDPK1 (phospho S393) peptide(aa386-396)

Lane 3: PDPK1 non-phospho peptide(aa386-401)

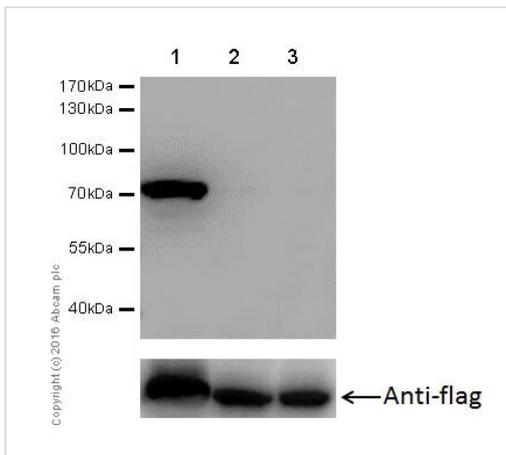
Lane 4: PDPK1 (phospho S396) peptide (aa392-401)

Lane 5: PDPK1 (phospho S396) peptide(aa393-402)

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated ([ab97051](#)) at 1/20000 dilution was used as secondary antibody.

Blocking/Dilution buffer: 5% NFD/MTBST.

Exposure time: 3 minutes.



**All lanes** : Anti-PDPK1 (phospho S393) antibody [EPR19818] (ab206340) at 1/1000 dilution

**Lane 1** : HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate transfected with PDPK1 WT

**Lane 2** : HEK-293T whole cell lysate transfected with PDPK1 (WT), then treated with alkaline phosphatase for 1 hour

**Lane 3** : HEK-293T whole cell lysate transfected with PDPK1 S393A mutant

Lysates/proteins at 10 µg per lane.

### Secondary

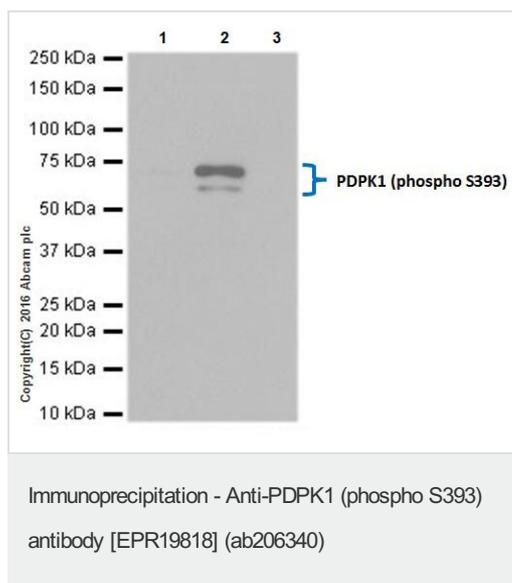
**All lanes** : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/2000 dilution

**Predicted band size:** 63 kDa

**Observed band size:** 60,63 kDa [why is the actual band size different from the predicted?](#)

**Exposure time:** 5 seconds

**Blocking/Dilution buffer:** 5% BSA/TBST.



PDPK1 (phospho S393) was immunoprecipitated from 0.35 mg of HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate, transfected with PDPK1 (WT), with ab206340 at 1/40 dilution. Western blot was performed from the immunoprecipitate using ab206340 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

Lane 1: HEK-293T whole cell lysate transfected with PDPK1 (WT), 10 µg (Input).

Lane 2: ab206340 IP in HEK-293T whole cell lysate transfected with PDPK1 (WT).

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab206340 in HEK-293T whole cell lysate transfected with PDPK1 (WT).

Blocking and dilution buffer and concentration: 5% NFDN/TBST.

Exposure time: 3 minutes.

The plasmids were kindly provided by our collaborator Dr. Yi Rao, Peking University.

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-PDPK1 (phospho S393) antibody [EPR19818] (ab206340)

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

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