


## Product datasheet

# Anti-PDPK1 antibody [3H3D9] ab234064

5 Images

### Overview

---

<b>Product name</b>	Anti-PDPK1 antibody [3H3D9]
<b>Description</b>	Mouse monoclonal [3H3D9] to PDPK1
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> WB, Flow Cyt, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse, Rat 
<b>Immunogen</b>	Recombinant fragment corresponding to Human PDPK1 aa 457-556. (Expressed in E.coli). Database link: <a href="#">O15530</a>
<b>Positive control</b>	WB: MCF7, HeLa, and U937 cell lysates; Human PDPK1 (aa 457-556) recombinant protein; PDPK1 (aa 457-556)-hlgGfc transfected HEK-293 cell lysate. Flow Cyt: HeLa cells. ICC/IF: HeLa cells.
<b>General notes</b>	<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™ 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 with,” however this information is not covered by our Abpromise guarantee.</p> <p>Applications &amp; 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.</p> <p>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&amp;As.</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>	Preservative: 0.05% Sodium azide Constituent: PBS
<b>Purity</b>	Protein G purified
<b>Purification notes</b>	Purified from tissue culture supernatant.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	3H3D9
<b>Isotype</b>	IgG1

## Applications

Our [Abpromise guarantee](#) covers the use of **ab234064** in the following tested applications.

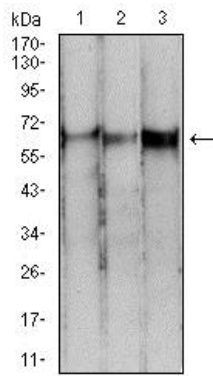
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/100 - 1/500. Predicted molecular weight: 63 kDa.
Flow Cyt		1/200 - 1/400.
ICC/IF		1/200 - 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.
<b>Cellular localization</b>	Cytoplasm. Membrane. Membrane-associated after cell stimulation leading to its translocation. Tyrosine phosphorylation seems to occur only at the plasma membrane.

## Images



Western blot - Anti-PDPK1 antibody [3H3D9]  
(ab234064)

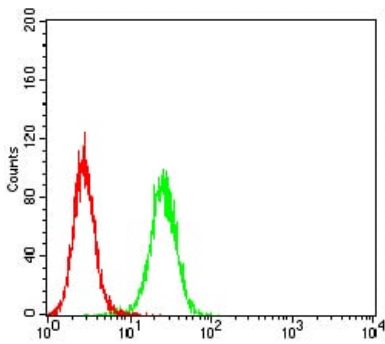
**All lanes** : Anti-PDPK1 antibody [3H3D9] (ab234064) at 1/100 dilution

**Lane 1** : MCF7 (human breast adenocarcinoma cell line) cell lysate

**Lane 2** : HeLa (human epithelial cell line from cervix adenocarcinoma) cell lysate

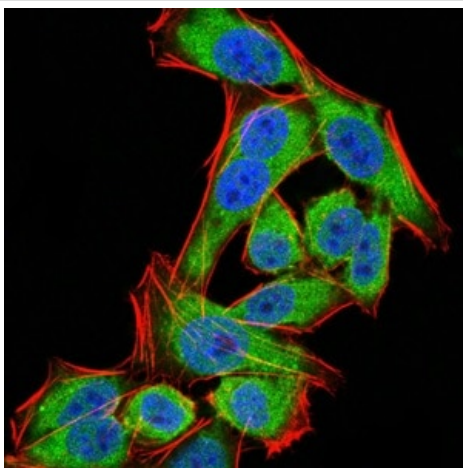
**Lane 3** : U937 (human histiocytic lymphoma cell line) cell lysate

**Predicted band size:** 63 kDa



Flow Cytometry - Anti-PDPK1 antibody [3H3D9]  
(ab234064)

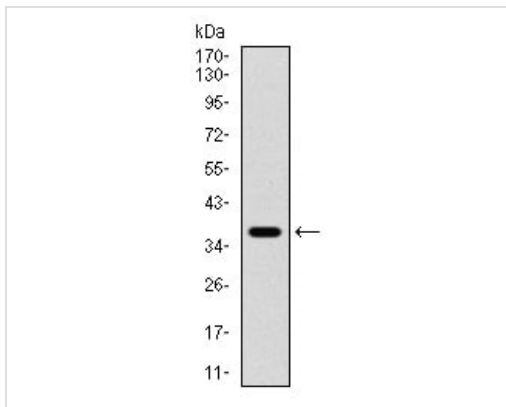
Flow cytometric analysis of HeLa (human epithelial cell line from cervix adenocarcinoma) cell line labeling PDPK1 with ab234064 at 1/200 dilution (green) compared with a negative control (red).



Immunocytochemistry/ Immunofluorescence - Anti-PDPK1 antibody [3H3D9] (ab234064)

HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained for PDPK1 (green) using ab234064 at 1/200 dilution in ICC/IF.

Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

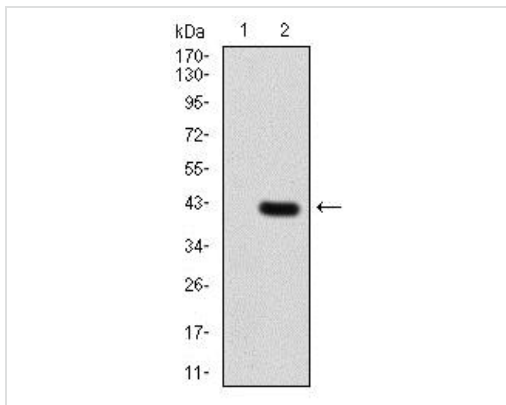


Western blot - Anti-PDPK1 antibody [3H3D9]  
(ab234064)

Anti-PDPK1 antibody [3H3D9] (ab234064) at 1/100 dilution +  
Human PDPK1 (aa 457-556) recombinant protein

**Predicted band size:** 63 kDa

Expected MW is 37.9 kDa.



Western blot - Anti-PDPK1 antibody [3H3D9]  
(ab234064)

**All lanes :** Anti-PDPK1 antibody [3H3D9] (ab234064) at 1/100  
dilution

**Lane 1 :** HEK-293 (human epithelial cell line from embryonic  
kidney) cell lysate

**Lane 2 :** PDPK1 (aa 457-556)-hlgGFc transfected HEK-293 cell  
lysate

**Predicted band size:** 63 kDa

**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