

# Anti-PDPK1 antibody ab186870

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

### Overview

<b>Product name</b>	Anti-PDPK1 antibody
<b>Description</b>	Rabbit polyclonal to PDPK1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Recombinant fragment corresponding to Human PDPK1 aa 277-556 (C terminal). Database link: <a href="#">O15530</a>
<b>Positive control</b>	LOVO and mouse lung extracts.
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>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, along with publications, 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>	pH: 7.30 Preservative: 0.02% Sodium azide Constituents: 49% PBS, 50% Glycerol
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

### Applications

## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab186870 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
ICC/IF		Use at an assay dependent concentration.
WB		1/500 - 1/2000. Predicted molecular weight: 63 kDa.
IHC-P		1/50 - 1/200. <b>ab171870</b> - Rabbit polyclonal IgG, is suitable for use as an isotype control with this antibody.

## Target

### Function

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.

### Tissue specificity

Appears to be expressed ubiquitously.

### Sequence similarities

Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PDK1 subfamily. Contains 1 PH domain.  
Contains 1 protein kinase domain.

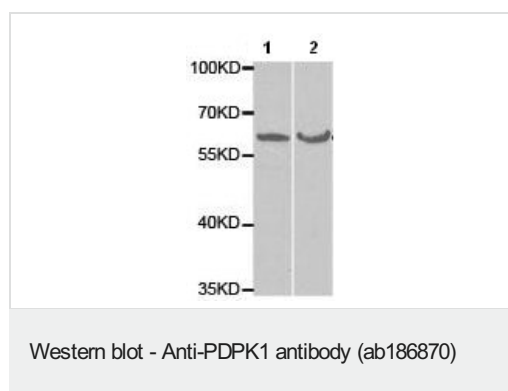
### Post-translational modifications

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

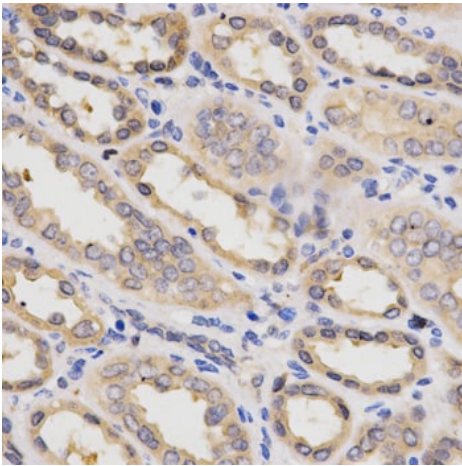


**All lanes :** Anti-PDPK1 antibody (ab186870) at 1/500 dilution

**Lane 1 :** LOVO extract

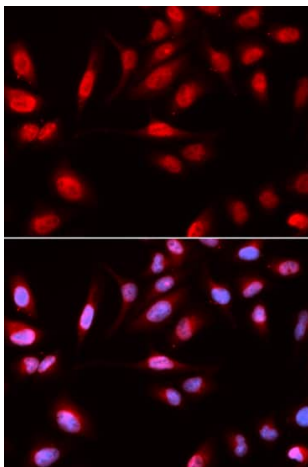
**Lane 2 :** Mouse lung extract

**Predicted band size:** 63 kDa



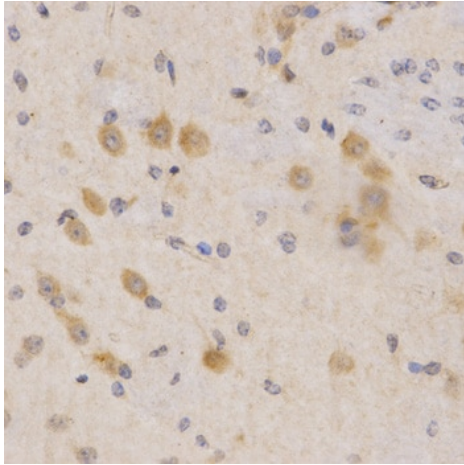
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue sections labeling PDPK1 with ab186870 at 1/200 dilution. Heat-mediated antigen retrieval with Tris-EDTA pH 9.0 for 15 minutes, 95-100°C.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDPK1 antibody (ab186870)



Immunocytochemistry/Immunofluorescence analysis of U2OS cells using ab186870. Blue DAPI for nuclear staining.

Immunocytochemistry/ Immunofluorescence - Anti-PDPK1 antibody (ab186870)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse brain tissue sections labeling PDPK1 with ab186870 at 1/200 dilution. Heat-mediated antigen retrieval with Tris-EDTA pH 9.0 for 15 minutes, 95-100°C.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDPK1 antibody (ab186870)

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

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