

## Product datasheet

# Anti-PDK1 antibody [4A11] ab110025

★★★★★ [2 Abreviews](#) [34 References](#) [6 Images](#)

### Overview

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<b>Product name</b>	Anti-PDK1 antibody [4A11]
<b>Description</b>	Mouse monoclonal [4A11] to PDK1
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> WB, ICC/IF, IHC-P, ELISA, Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human, Monkey, African green monkey
<b>Immunogen</b>	Recombinant fragment corresponding to Human PDK1 aa 308-436. Database link: <a href="#">Q15118</a>
<b>Positive control</b>	Hela, Jurkat, HepG2, PC-12, and Cos7 cell lysate, human breast cancer and Human brain tissues, HELA and Lovo cells
<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

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<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>	4A11
<b>Isotype</b>	IgG1

### Applications

## Applications

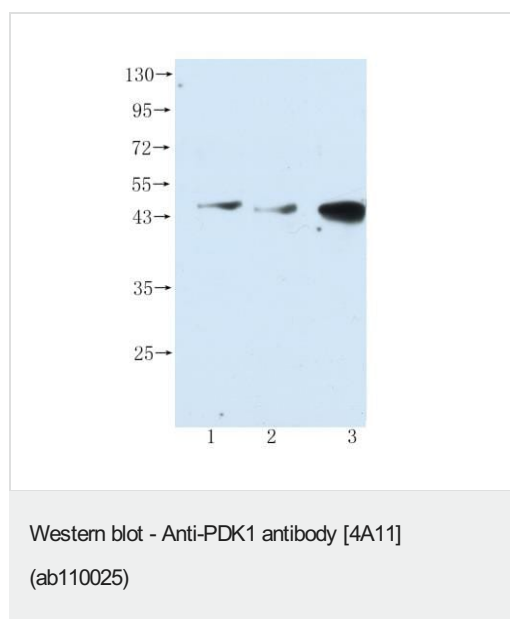
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab110025 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (1)	1/500 - 1/2000. Detects a band of approximately 44 kDa (predicted molecular weight: 49 kDa).
ICC/IF	★★★★★ (1)	1/200 - 1/1000.
IHC-P		1/200 - 1/1000.
ELISA		Use at an assay dependent concentration.
Flow Cyt		Use at an assay dependent concentration. <b>ab170190</b> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

## Target

<b>Function</b>	Inhibits the mitochondrial pyruvate dehydrogenase complex by phosphorylation of the E1 alpha subunit, thus contributing to the regulation of glucose metabolism.
<b>Tissue specificity</b>	Expressed predominantly in the heart.
<b>Sequence similarities</b>	Belongs to the PDK/BCKDK protein kinase family. Contains 1 histidine kinase domain.
<b>Cellular localization</b>	Mitochondrion matrix.

## Images



**Lanes 1-2** : Anti-PDK1 antibody [4A11] (ab110025) at 1/500 dilution

**Lane 3** : Beta-actin antibody at 1/10000 dilution

**Lane 1** : Jurkat cell lysate

**Lane 2** : HeLa cell lysate

**Lane 3** : NIH3T3 cell lysate

Lysates/proteins at 15 µl per lane.

### Secondary

**All lanes** : HRP-Goat Anti-Mouse IgG (Fc) at 1/10000 dilution

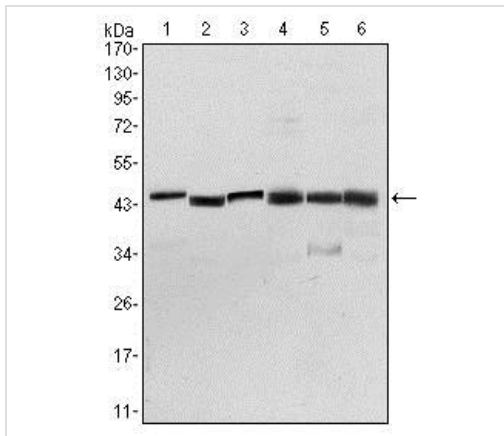
**Predicted band size:** 49 kDa

12% SDS gel.

Block the membrane for 1 h at room temperature or overnight at 4°C using blocking buffer, 5% milk.

Incubate in ab110025 overnight at 4°C.

Incubation at room temperature for 1 hour with the secondary antibody.



Western blot - Anti-PDK1 antibody [4A11]  
(ab110025)

**All lanes :** Anti-PDK1 antibody [4A11] (ab110025) at 1/500 dilution

**Lane 1 :** NIH3T3 cell lysate

**Lane 2 :** Hela cell lysate

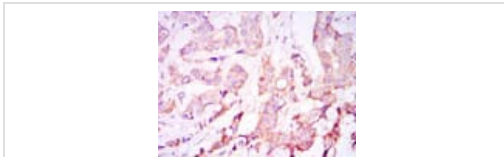
**Lane 3 :** Jurkat cell lysate

**Lane 4 :** HepG2 cell lysate

**Lane 5 :** PC-12 cell lysate

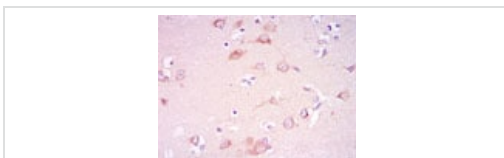
**Lane 6 :** Cos7 cell lysate

**Predicted band size:** 49 kDa



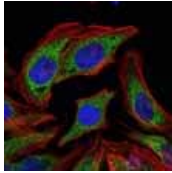
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDK1 antibody [4A11]  
(ab110025)

Immunohistochemical analysis of paraffin-embedded Human breast cancer tissues using ab110025 at a dilution of 1/200 with DAB staining.



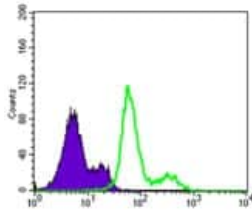
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PDK1 antibody [4A11]  
(ab110025)

Immunohistochemical analysis of paraffin-embedded Human brain tissues using ab110025 at a dilution of 1/200 with DAB staining.



Immunocytochemistry/ Immunofluorescence - Anti-PDK1 antibody [4A11] (ab110025)

Immunofluorescence analysis of HELA cells using ab110025 at a dilution of 1/200 (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



Flow Cytometry - Anti-PDK1 antibody [4A11] (ab110025)

Flow cytometric analysis of Lovo cells using ab110025 (green) and negative control (purple).

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

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