abcam

ab110025

Anti-PDK1 antibody [4A11]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.05% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Fragment Protein within Human PDK1 aa 300-450. The exact immunogen used to generate this antibody is proprietary information. Database link Q15118
Clone number	4A11
Purification technique	Affinity purification Protein G
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from tissue culture supernatant.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	-

Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Expected

Species	Mouse
Dilution info	-
Notes	-

Species	African green monkey
Dilution info	-
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Predicted

Species	Rat, Monkey
Dilution info	-
Notes	-

ELISA

Expected

Species	Mouse, Rat, African green monkey, Monkey, Human
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Mouse
Dilution info	1/500 - 1/2000
Notes	-

Species	African green monkey

Dilution info	1/500 - 1/2000
Notes	-

Species	Human
Dilution info	1/500 - 1/2000
Notes	-

Predicted

Species	Rat, Monkey
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1/200 - 1/1000
Notes	-

Expected

Species	Mouse, African green monkey
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Rat, Monkey
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/200 - 1/1000
Notes	-

Expected

Species	Mouse, African green monkey
Dilution info	Use at an assay dependent concentration.
Notes	-

Predicted

Species	Rat, Monkey
Dilution info	-
Notes	-

Target data

See full target information PDK1

Function	Kinase that plays a key role in regulation of glucose and fatty acid metabolism and homeostasis via phosphorylation of the pyruvate dehydrogenase subunits PDHA1 and PDHA2 (PubMed:7499431, PubMed:18541534, PubMed:22195962, PubMed:26942675, PubMed:17683942). This inhibits pyruvate dehydrogenase activity, and thereby regulates metabolite flux through the tricarboxylic acid cycle, down-regulates aerobic respiration and inhibits the formation of acetyl-coenzyme A from pyruvate (PubMed:18541534, PubMed:22195962, PubMed:26942675). Plays an important role in cellular responses to hypoxia and is important for cell proliferation under hypoxia (PubMed:18541534, PubMed:22195962, PubMed:26942675).

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C

Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

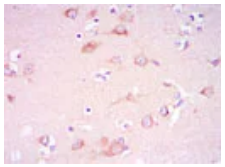
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

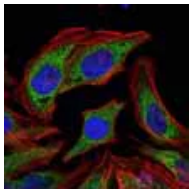
6 product images



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

PDK1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-PDK1 antibody

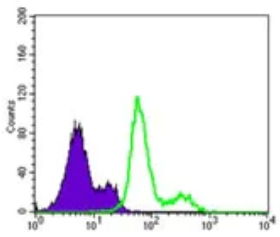
Immunohistochemical analysis of paraffin-embedded Human brain tissues using ab110025 aty a dilution of 1/200 with DAB staining.



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

PDK1 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-PDK1 antibody

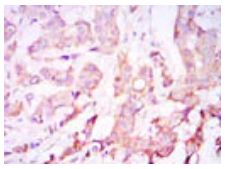
Immunofluorescence analysis of HELA cells using ab110025 at a dilution of 1/200 (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.



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

PDK1 Flow Cytometry staining using mouse Anti-PDK1 antibody

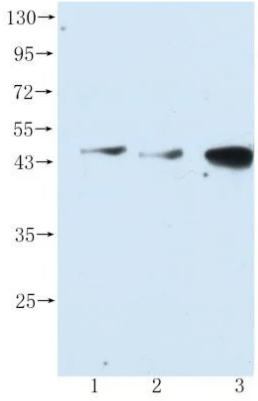
Flow cytometric analysis of Lovo cells using ab110025 (green) and negative control (purple).



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

PDK1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-PDK1 antibody

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



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

PDK1 Western blot staining using mouse Anti-PDK1 antibody

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.

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

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

Lane 1:
Jurkat cell lysate at 15 µL

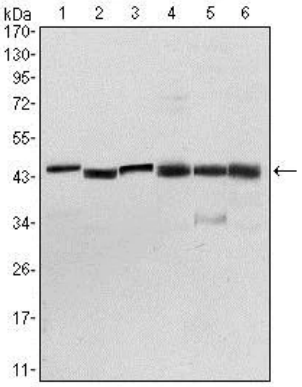
Lane 2:
HeLa cell lysate at 15 µL

Lane 3:
NIH3T3 cell lysate at 15 µL

Secondary

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

Predicted band size: 49 kDa



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

All lanes:
Western blot - 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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.