

Datasheet: VMA00988

BATCH NUMBER 100006567

Description:	MOUSE ANTI HUMAN PDK1
Specificity:	PDK1
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	C01/3B1
Isotype:	IgG2a
Quantity:	100 µl

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Immunoprecipitation	▪			2.5 µg
Western Blotting	▪			1/2000

The PrecisionAb label is reserved for antibodies that meet the defined performance criteria within Bio-Rad's ongoing antibody validation programme. Click [here](#) to learn how we validate our PrecisionAb range. Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Further optimization may be required dependent on sample type

Target Species

Human

Species Cross Reactivity

Reacts with: Rat

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers	0.09% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	<i>E. coli</i> -derived recombinant protein, aa 29-436 of human PDK1
External Database Links	<p>UniProt: O15530 Related reagents</p> <p>Entrez Gene: 5170 PDK1 Related reagents</p>
Synonyms	PDK1
Specificity	<p>Mouse anti Human PDK1 antibody recognizes pyruvate dehydrogenase kinase isoform 1, also known as pyruvate dehydrogenase complex kinase.</p> <p>PDK1 is a kinase involved in the regulation of the pyruvate dehydrogenase complex located in the mitochondrial matrix of eukaryotic cells. This complex acts to convert pyruvate (a product of glycolysis in the cytosol) to acetyl-coA, which is then oxidized in the mitochondria to produce energy, in the citric acid cycle. PDK1 phosphorylates pyruvate dehydrogenase, the first component of the pyruvate dehydrogenase complex. Phosphorylation of pyruvate dehydrogenase by PDK1 results in downregulation in the pyruvate dehydrogenase complex activity, decreased oxidation of pyruvate and increased conversion of pyruvate to lactate. Aberrant levels of PDK1 activity have been linked to a number of different cancers, including non-small cell lung cancer, colorectal cancer and thyroid cancer (Wang et al. 2019)(Jin et al. 2020)(Wang et al. 2020).</p>
Western Blotting	Mouse anti Human PDK1 antibody detects a band of 44 kDa in LNCaP cell lysates
Storage	<p>This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
Guarantee	12 months from date of despatch
Acknowledgements	PrecisionAb is a trademark of Bio-Rad Laboratories
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/VMA00988 10040
Regulatory	For research purposes only

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
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