

## Datasheet: VMA00488KT

<b>Description:</b>	PDIA1 ANTIBODY WITH CONTROL LYSATE
<b>Specificity:</b>	PDIA1
<b>Format:</b>	Purified
<b>Product Type:</b>	PrecisionAb Monoclonal
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	2 Westerns

### 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	▪			1/1000

**PrecisionAb antibodies have been extensively [validated for the western blot application](#).** The antibody has been validated at the suggested dilution. 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 dependant on sample type.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	20µl Mouse monoclonal antibody purified by affinity chromatography on Protein G from ascites
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Immunogen</b>	Recombinant protein of human PDIA1
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P07237</a> <a href="#">Related reagents</a>

**Entrez Gene:**

[5034](#) P4HB [Related reagents](#)

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<b>Synonyms</b>	ERBA2L, PDI, PDIA1, PO4DB
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<b>Specificity</b>	<p><b>Mouse anti Human PDIA1 antibody</b> recognizes PDIA1, also known as cellular thyroid hormone-binding protein, collagen prolyl 4-hydroxylase beta, glutathione-insulin transhydrogenase, p55, procollagen-proline, 2-oxoglutarate 4-dioxygenase beta polypeptide or thyroid hormone-binding protein p55.</p> <p>The P4HB gene encodes the beta subunit of prolyl 4-hydroxylase, a highly abundant multifunctional enzyme that belongs to the protein disulfide isomerase family. When present as a tetramer consisting of two alpha and two beta subunits, this enzyme is involved in hydroxylation of prolyl residues in procollagen. This enzyme is also a disulfide isomerase containing two thioredoxin domains that catalyze the formation, breakage and rearrangement of disulfide bonds. Other known functions include its ability to act as a chaperone that inhibits aggregation of misfolded proteins in a concentration-dependent manner, its ability to bind thyroid hormone, its role in both the influx and efflux of S-nitrosothiol-bound nitric oxide, and its function as a subunit of the microsomal triglyceride transfer protein complex (provided by RefSeq, Jul 2008).</p> <p>Mouse anti Human PDIA1 antibody detects a band of 57 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.</p>
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<b>Western Blotting</b>	Anti PDIA1 detects a band of approximately 57 kDa in HeLa cell lysate
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<b>Instructions For Use</b>	Please refer to the <a href="#">PrecisionAb western blotting protocol</a> . For additional information on secondary antibody dilution and exposure time see product web page.
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<b>Lysate Composition</b>	400µg HeLa lysate lyophilized in RIPA buffer.
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<b>Lysate Reconstitution</b>	<p>- If using DDT reconstitute the lyophilized lysate with 190µl DI H<sub>2</sub>O, add 200µl 2x Laemmli Sample Buffer and 10µl 2M DTT.</p> <p>- If using BME reconstitute the lyophilized lysate with 180µl DI H<sub>2</sub>O, add 200µl 2x Laemmli Sample Buffer and 20µl BME.</p> <p>Heat at 95°C for 5 minutes. For 10 well mini gels load 25µl. For other gel and comb formats please refer to the PrecisionAb western blotting protocol.</p>
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<b>Storage</b>	<p>Antibody: Store undiluted at -20°C, avoiding repeated freeze thaw cycles.</p> <p>Lysate: Store lyophilized lysate at -20°C. After reconstitution aliquot and store at -20°C for up to 3 months or at -80°C for longer term storage.</p>
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<b>Guarantee</b>	As supplied, 12 months from date of despatch.
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<b>Acknowledgements</b>	PrecisionAb™ is a trademark of Bio-Rad Laboratories.
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**Health And Safety  
Information**

Material Safety Datasheet documentation #10040 #10561 available at:  
Antibody (10040): <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>  
Lysate Material (10561): <https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf>

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (H/L) (STAR207...) [HRP](#)

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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