

## Datasheet: VMA00143

<b>Description:</b>	MOUSE ANTI ISOCITRATE DEHYDROGENASE 1
<b>Specificity:</b>	ISOCITRATE DEHYDROGENASE 1
<b>Format:</b>	Purified
<b>Product Type:</b>	PrecisionAb Monoclonal
<b>Clone:</b>	OTI2H9
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

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

**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.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Mouse monoclonal antibody purified by affinity chromatography from ascites.
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin 50% Glycerol
<b>Immunogen</b>	Full-length protein expressed in 293T cell transfected with human isocitrate dehydrogenase 1 expression vector
<b>External Database</b>	<b>UniProt:</b>

**Entrez Gene:**

<b>Synonyms</b>	PICD
<b>Specificity</b>	<p><b>Mouse anti Human isocitrate dehydrogenase 1 antibody, clone OT12H9</b> recognizes isocitrate dehydrogenase 1, also known as NADP(+)-specific ICDH, NADP-dependent isocitrate dehydrogenase, cytosolic, NADP-dependent isocitrate dehydrogenase, peroxisomal, epididymis luminal protein 216, epididymis secretory protein Li 26, isocitrate dehydrogenase [NADP] cytoplasmic and oxalosuccinate decarboxylase.</p> <p>Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes NAD(+) as the electron acceptor and the other NADP(+). Five isocitrate dehydrogenases have been reported: three NAD(+)-dependent isocitrate dehydrogenases, which localize to the mitochondrial matrix, and two NADP(+)-dependent isocitrate dehydrogenases, one of which is mitochondrial and the other predominantly cytosolic. Each NADP(+)-dependent isozyme is a homodimer. Encoded by IDH1 gene, isocitrate dehydrogenase 1 is the NADP(+)-dependent isocitrate dehydrogenase found in the cytoplasm and peroxisomes. It contains the PTS-1 peroxisomal targeting signal sequence. The presence of this enzyme in peroxisomes suggests roles in the regeneration of NADPH for intraperoxisomal reductions, such as the conversion of 2, 4-dienoyl-CoAs to 3-enoyl-CoAs, as well as in peroxisomal reactions that consume 2-oxoglutarate, namely the alpha-hydroxylation of phytanic acid. The cytoplasmic enzyme serves a significant role in cytoplasmic NADPH production. Alternatively spliced transcript variants encoding the same protein have been found for IDH1 (provided by RefSeq, Sep 2013).</p> <p>Mouse anti Human isocitrate dehydrogenase 1 antibody detects a band of 46 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.</p>
<b>Western Blotting</b>	Anti isocitrate dehydrogenase 1 detects a band of approximately 46 kDa in HepG2 cell lysates
<b>Storage</b>	Store undiluted at -20°C, avoiding repeated freeze thaw cycles.
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	PrecisionAb is a trademark of Bio-Rad Laboratories.
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10048 available at: Antibody (10048): <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10048.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10048.pdf</a>
<b>Regulatory</b>	For research purposes only

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

'M369938:200529'

Printed on 29 Aug 2021

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