

Datasheet: VMA00235

Description:	MOUSE ANTI ALDEHYDE DEHYDROGENASE 2
Specificity:	ALDEHYDE DEHYDROGENASE 2
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	4G6A3
Isotype:	IgG1
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
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.

Target Species

Human

Species Cross Reactivity

Reacts with: Mouse, 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

Mouse monoclonal antibody prepared by affinity chromatography on Protein G from ascites.

Buffer Solution

Phosphate buffered saline.

Preservative Stabilisers

0.09% Sodium Azide (NaN₃).

Approx. Protein Concentrations	IgG concentration 0.5 mg/ml.
Immunogen	Recombinant protein corresponding to amino acids 317-517 of human aldehyde dehydrogenase 2 expressed in <i>E. coli</i>
External Database Links	<p>UniProt: P05091 Related reagents</p> <p>Entrez Gene: 217 ALDH2 Related reagents</p>
Synonyms	ALDM
Specificity	<p>Mouse anti Human aldehyde dehydrogenase 2 antibody recognizes aldehyde dehydrogenase, mitochondrial, also known as ALDH class 2, acetaldehyde dehydrogenase 2, aldehyde dehydrogenase, mitochondrial, liver mitochondrial ALDH and nucleus-encoded mitochondrial aldehyde dehydrogenase 2.</p> <p>This protein belongs to the aldehyde dehydrogenase family of proteins. Aldehyde dehydrogenase is the second enzyme of the major oxidative pathway of alcohol metabolism. Two major liver isoforms of aldehyde dehydrogenase, cytosolic and mitochondrial can be distinguished by their electrophoretic mobilities, kinetic properties, and subcellular localizations. Most Caucasians have two major isozymes, while approximately 50% of Orientals have the cytosolic isozyme but not the mitochondrial isozyme. A remarkably higher frequency of acute alcohol intoxication among Orientals than among Caucasians could be related to the absence of a catalytically active form of the mitochondrial isozyme. The increased exposure to acetaldehyde in individuals with the catalytically inactive form may also confer greater susceptibility to many types of cancer. ALDH2 encodes a mitochondrial isoform, which has a low Km for acetaldehydes, and is localized in mitochondrial matrix. Alternative splicing results in multiple transcript variants encoding distinct isoforms (provided by RefSeq, Mar 2011).</p> <p>Mouse anti Human aldehyde dehydrogenase 2 antibody detects a band of 56 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.</p>
Western Blotting	Anti aldehyde dehydrogenase 2 detects a band of approximately 56 kDa in HepG2 cell lysates.
Storage	Store undiluted at -20°C, avoiding repeated freeze thaw cycles.
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/VMA00235 Antibody (10040)

Regulatory

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

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