

Datasheet: VMA00254KT

Description:	ALDEHYDE DEHYDROGENASE 3 ANTIBODY WITH CONTROL LYSATE
Specificity:	ALDEHYDE DEHYDROGENASE 3
Format:	Purified
Product Type:	PrecisionAb Monoclonal
Clone:	OTI1B6
Isotype:	IgG2a
Quantity:	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.

	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.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	20µl Mouse monoclonal antibody purified by affinity chromatography from ascites
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin 50% Glycerol
Immunogen	Full length recombinant human aldehyde dehydrogenase 3 (NP_000682) produced in HEK293T cells
External Database	UniProt:

Links

[P30838](#) [Related reagents](#)

Entrez Gene:

[218](#) ALDH3A1 [Related reagents](#)

Synonyms

ALDH3

Specificity

Mouse anti Human aldehyde dehydrogenase 3 antibody recognizes the aldehyde dehydrogenase 3, also known as aldehyde dehydrogenase, dimeric NADP-preferring, aldehyde dehydrogenase isozyme 3, aldehyde dehydrogenase type III, aldehyde dehydrogenase, dimeric NADP-preferring and stomach aldehyde dehydrogenase.

Aldehyde dehydrogenases oxidize various aldehydes to the corresponding acids. They are involved in the detoxification of alcohol-derived acetaldehyde and in the metabolism of corticosteroids, biogenic amines, neurotransmitters, and lipid peroxidation. The enzyme encoded by ALDH3A1 gene forms a cytoplasmic homodimer that preferentially oxidizes aromatic and medium-chain (6 carbons or more) saturated and unsaturated aldehyde substrates. It is thought to promote resistance to UV and 4-hydroxy-2-nonenal-induced oxidative damage in the cornea. The gene is located within the Smith-Magenis syndrome region on chromosome 17. Multiple alternatively spliced variants, encoding the same protein, have been identified (provided by RefSeq, Sep 2008).

Mouse anti Human aldehyde dehydrogenase 3 antibody detects a band of 50 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.

Western Blotting

Anti aldehyde dehydrogenase 3 detects a band of approximately 50 kDa in A549 cell lysates

Instructions For Use

Please refer to the [PrecisionAb western blotting protocol](#). For additional information on secondary antibody dilution and exposure time see product web page.

Lysate Composition

400µg A549 lysate lyophilized in RIPA buffer.

Lysate Reconstitution

- If using DDT reconstitute the lyophilized lysate with 190µl DI H₂O, add 200µl 2x Laemmli Sample Buffer and 10µl 2M DTT.

- If using BME reconstitute the lyophilized lysate with 180µl DI H₂O, add 200µl 2x Laemmli Sample Buffer and 20µl BME.

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.

Storage

Antibody: Store undiluted at -20°C, avoiding repeated freeze thaw cycles.

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.

Guarantee

As supplied, 12 months from date of despatch.

Acknowledgements

PrecisionAb™ is a trademark of Bio-Rad Laboratories.

Health And Safety Information Material Safety Datasheet documentation #10048 #10561 available at:
Antibody (10048): <https://www.bio-rad-antibodies.com/uploads/MSDS/10048.pdf>
Lysate Material (10561): <https://www.bio-rad-antibodies.com/uploads/MSDS/10561.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

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

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

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