

Datasheet: VPA00358KT

| | |
|----------------------|---------------------------------------|
| Description: | ALDH18A1 ANTIBODY WITH CONTROL LYSATE |
| Specificity: | ALDH18A1 |
| Format: | Purified |
| Product Type: | PrecisionAb Polyclonal |
| Isotype: | Polyclonal IgG |
| 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

Species Cross Reactivity

Reacts with: Mouse

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

20µl Rabbit polyclonal antibody purified by affinity chromatography

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide (NaN₃)
1% Bovine Serum Albumin

Immunogen

KLH-conjugated synthetic peptide corresponding to aa 176-205 of human ALDH18A1

| | |
|--------------------------------|--|
| External Database Links | UniProt: P54886 Related reagents |
| | Entrez Gene: 5832 ALDH18A1 Related reagents |
| Synonyms | GSAS, P5CS, PYCS |
| Specificity | <p>Rabbit anti Human ALDH18A1 antibody recognizes ALDH18A1, also known as aldehyde dehydrogenase family 18 member A1, delta-1-pyrroline-5-carboxylate synthase, P5CS and pyrroline-5-carboxylate synthetase (glutamate gamma-semialdehyde synthetase).</p> <p>The ALDH18A1 gene is a member of the aldehyde dehydrogenase family and encodes a bifunctional ATP- and NADPH-dependent mitochondrial enzyme with both gamma-glutamyl kinase and gamma-glutamyl phosphate reductase activities. The encoded protein catalyzes the reduction of glutamate to delta1-pyrroline-5-carboxylate, a critical step in the de novo biosynthesis of proline, ornithine and arginine. Mutations in ALDH18A1 lead to hyperammonemia, hypoorithinemia, hypocitrullinemia, hypoargininemia and hypoprolinemia and may be associated with neurodegeneration, cataracts and connective tissue diseases. Alternatively spliced transcript variants, encoding different isoforms, have been described for ALDH18A1.</p> <p>Rabbit anti Human ALDH18A1 antibody detects a band of 82 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.</p> |
| Western Blotting | Anti ALDH18A1 detects a band of approximately 82 kDa in HepG2 cell lysate |
| 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 HepG2 lysate lyophilized in RIPA buffer |
| Lysate Reconstitution | <p>- If using DDT reconstitute the lyophilized lysate with 190µl DI H₂O, add 200µl 2x Laemmli Sample Buffer and 10µl 2M DTT.</p> <p>- If using BME reconstitute the lyophilized lysate with 180µl DI H₂O, 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> |
| Storage | <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> |
| 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 #10041 #10561 available at:
Antibody (10041): <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.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 Rabbit IgG (H/L) (STAR208...) [HRP](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

From March 15, 2021, we will no longer supply printed datasheets with our products.

Look out for updates on how to access your digital version at bio-rad-antibodies.com

'M350836:190315'

Printed on 10 Feb 2021

© 2021 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)