

Datasheet: VPA00358

**BATCH NUMBER 160309**

<b>Description:</b>	RABBIT ANTI ALDH18A1
<b>Specificity:</b>	ALDH18A1
<b>Format:</b>	Purified
<b>Product Type:</b>	PrecisionAb Polyclonal
<b>Isotype:</b>	Polyclonal IgG
<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.

### 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

Rabbit polyclonal antibody purified by affinity chromatography

### Buffer Solution

Phosphate buffered saline

### Preservative Stabilisers

0.09% Sodium Azide (NaN<sub>3</sub>)

**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**

**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).

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, hypornithinemia, 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.

Rabbit anti Human ALDH18A1 antibody detects a band of 82 kDa. The antibody has been extensively validated for western blotting using whole cell lysates.

---

**Western Blotting**

Anti ALDH18A1 detects a band of approximately 82 kDa in HepG2 cell lysate

---

**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/VPA00358>  
10040

---

**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

**Worldwide**

Tel: +44 (0)1865 852 700

**Europe**

Tel: +49 (0) 89 8090 95 21

To

**America** Fax: +1 919 878 3751

Fax: +44 (0)1865 852 739

Fax: +49 (0) 89 8090 95 50

find a

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

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)

'M374238:201027'

**Printed on 19 Jan 2024**

---

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)