

Product datasheet for **TA336073**

P5CS (ALDH18A1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	WB
Reactivity:	Human
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	The immunogen for Anti-ALDH18A1 Antibody: synthetic peptide directed towards the N terminal of human ALDH18A1. Synthetic peptide located within the following region: SVIRHVRWSNIPFITVPLSRTHGKSFHRSELKHAKRIVVKLGSAVVTR
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. <i>Note that this product is shipped as lyophilized powder to China customers.</i>
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	87 kDa
Gene Name:	aldehyde dehydrogenase 18 family member A1
Database Link:	NP_001017423 Entrez Gene 5832 Human P54886



[View online »](#)

Background:

This 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 this gene lead to hyperammonemia, hypoornithinemia, hypocitrullinemia, hypoargininemia and hypoprolinemia and may be associated with neurodegeneration, cataracts and connective tissue diseases. This 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 this gene lead to hyperammonemia, hypoornithinemia, 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 this gene.

Synonyms:

ARCL3A; GSAS; P5CS; PYCS

Note:

Immunogen Sequence Homology: Pig: 100%; Rat: 100%; Horse: 100%; Human: 100%; Bovine: 100%; Dog: 93%; Rabbit: 93%; Zebrafish: 92%; Mouse: 86%; Guinea pig: 86%

Protein Families:

Druggable Genome

Protein Pathways:

Arginine and proline metabolism, Metabolic pathways

Product images:

WB Suggested Anti-ALDH18A1 Antibody Titration: 0.2-1 ug/ml; ELISA Titer: 1:62500; Positive Control: 721_B cell lysate ALDH18A1 is supported by BioGPS gene expression data to be expressed in 721_B