



# Anti-ALDH18A1 (aa 775-784) polyclonal antibody (DPABH-24390)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Antigen Description</b>	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, 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 this gene.
<b>Specificity</b>	DPABH-24390 is expected to recognize both reported isoforms (NP_002851.2; NP_001017423.1).
<b>Immunogen</b>	Synthetic peptide: C-SEHGSLKYLH, corresponding to C terminal amino acids 775-784 of Human P5CS (NP_002851.2).
<b>Isotype</b>	IgG
<b>Source/Host</b>	Goat
<b>Species Reactivity</b>	Mouse, Human
<b>Purification</b>	Immunogen affinity purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB
<b>Format</b>	Liquid
<b>Size</b>	100 µg

<b>Buffer</b>	Constituents: 0.5% BSA, Tris buffered saline, pH 7.3
<b>Preservative</b>	0.02% Sodium Azide
<b>Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">ALDH18A1 aldehyde dehydrogenase 18 family, member A2 [ Homo sapiens ]</a>
<b>Official Symbol</b>	ALDH18A1
<b>Synonyms</b>	ALDH18A1; aldehyde dehydrogenase 18 family, member A1; GSAS; P5CS; PYCS; ARCL3A; delta-1-pyrroline-5-carboxylate synthase; delta1-pyrroline-5-carboxylate synthetase; aldehyde dehydrogenase family 18 member A1; delta-1-pyrroline-5-carboxylate synthetase; pyrroline-5-carboxylate synthetase (glutamate gamma-semialdehyde synthetase);
<b>Entrez Gene ID</b>	<a href="#">5832</a>
<b>Protein Refseq</b>	<a href="#">NP_001017423.1</a>
<b>UniProt ID</b>	<a href="#">P54886</a>
<b>Pathway</b>	Amino acid synthesis and interconversion (transamination); Arginine and proline metabolism; Biosynthesis of amino acids; Metabolism of amino acids and derivatives
<b>Function</b>	ATP binding; glutamate 5-kinase activity; glutamate-5-semialdehyde dehydrogenase activity; poly(A) RNA binding