



# Anti-ALDH18A1 (aa 696-795) polyclonal antibody (DPAB-DC2637)

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, hypoonithinemia, hypocitrullinemia, hypoargininemia and hypoprolineemia 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>Immunogen</b>	ALDH18A1 (NP_002851, 696 a.a. ~ 795 a.a) partial recombinant protein with GST tag. The sequence is TDVIVTEDENTAEFFLQHVDSACVFWNASTRFSDGYRFLGAIEVGISTSRHARGPVGLE GLLTTKWLLRGKDHVVSDFFSEHGSLKYLHENLPIQRNTN
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	WB (Recombinant protein), ELISA,
<b>Size</b>	50 µl
<b>Buffer</b>	50 % glycerol
<b>Preservative</b>	None
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

# GENE INFORMATION

Gene Name	<a href="#">ALDH18A1 aldehyde dehydrogenase 18 family, member A1 [ Homo sapiens (human) ]</a>
Official Symbol	ALDH18A1
Synonyms	ALDH18A1; aldehyde dehydrogenase 18 family, member A1; GSAS; P5CS; PYCS; ARCL3A; delta-1-pyrroline-5-carboxylate synthase; delta1-pyrroline-5-carboxlate synthetase; aldehyde dehydrogenase family 18 member A1; delta-1-pyrroline-5-carboxylate synthetase; pyrroline-5-carboxylate synthetase (glutamate gamma-semialdehyde synthetase);
Entrez Gene ID	<a href="#">5832</a>
Protein Refseq	<a href="#">NP_001017423</a>
UniProt ID	<a href="#">P54886</a>
Chromosome Location	10q24.3
Pathway	Amino acid synthesis and interconversion (transamination); Arginine and proline metabolism; Biosynthesis of amino acids; Metabolism of amino acids and derivatives.
Function	ATP binding; glutamate 5-kinase activity; glutamate-5-semialdehyde dehydrogenase activity; poly(A) RNA binding