



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

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

GENE INFORMATION

Gene Name	ALDH18A1 aldehyde dehydrogenase 18 family, member A1 [Homo sapiens (human)]
Official Symbol	ALDH18A1
Synonyms	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);
Entrez Gene ID	5832
Protein Refseq	NP_001017423
UniProt ID	P54886
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