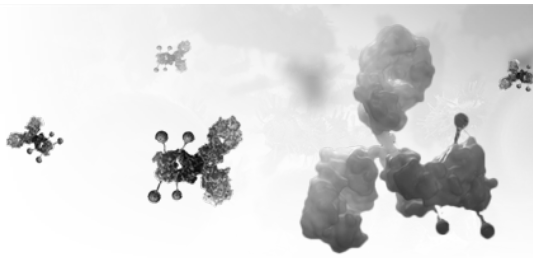

Mouse anti-Human ALDH18A1 monoclonal antibody, clone 3C6 (CABT-B9745)

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

PRODUCT INFORMATION

Immunogen	ALDH18A1 (NP_002851, 696 a.a. ~ 796 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Isotype	IgG2b
Source/Host	Mouse
Species Reactivity	Human
Clone	3C6
Conjugate	Unconjugated
Applications	WB,sELISA,ELISA
Sequence Similarities	TDVIVTEDENTAEFFLQHVDSACVFWNASTRFSDGYRFGLGAEVGISTSRIHARGPVGLE GLLTTKWLLRGKDHVVSDFSEHGSLKYLHENLPIPQRNTN*
Format	Liquid
Size	100 µg
Buffer	In 1x PBS, pH 7.2
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

BACKGROUND

Introduction	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-

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221

	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. [provided by RefSeq, Jul 2008]
Keywords	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);

GENE INFORMATION

Entrez Gene ID	5832
UniProt ID	P54886
Pathway	Amino acid synthesis and interconversion (transamination), organism-specific biosystem; Arginine and proline metabolism, organism-specific biosystem; Arginine and proline metabolism, conserved biosystem; Metabolic pathways, organism-specific biosystem; Metabolism of amino acids and derivatives, organism-specific biosystem; Urea cycle and metabolism of amino groups, organism-specific biosystem
Function	ATP binding; glutamate 5-kinase activity; glutamate-5-semialdehyde dehydrogenase activity; kinase activity; nucleotide binding; oxidoreductase activity; transferase activity

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