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ALDH18A1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant ALDH18A1.
Catalog # AT1110a

Product Information

Application	WB, E
Primary Accession	P54886
Other Accession	NM_002860
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2b Kappa
Clone Names	2B5
Calculated MW	87302

Additional Information

Gene ID	5832
Other Names	Delta-1-pyrroline-5-carboxylate synthase, P5CS, Aldehyde dehydrogenase family 18 member A1, Glutamate 5-kinase, GK, Gamma-glutamyl kinase, Gamma-glutamyl phosphate reductase, GPR, Glutamate-5-semialdehyde dehydrogenase, Glutamyl-gamma-semialdehyde dehydrogenase, ALDH18A1, GSAS, P5CS, PYCS
Target/Specificity	ALDH18A1 (NP_002851, 696 a.a. ~ 795 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	ALDH18A1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

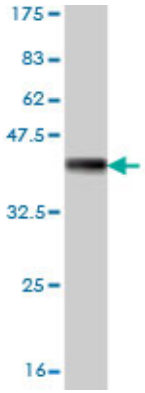
This gene is a member of the aldehyde dehydrogenase family and encodes a bifunctional ATP- and NADPH-dependent mitochondrial enzyme with both gamma-glutamyl kinase and gamma-glutamyl phosphate reductase activities. The encoded protein catalyzes the reduction of glutamate to delta1-pyrroline-5-carboxylate, 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. Alternatively spliced transcript variants, encoding different isoforms, have been described for this

gene.

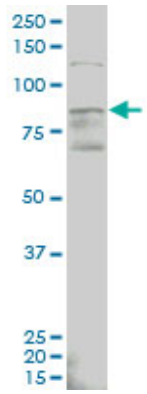
References

1.Functional specialization in proline biosynthesis of melanoma.De Ingeniis J, Ratnikov B, Richardson AD, Scott DA, Aza-Blanc P, De SK, Kazanov M, Pellecchia M, Ronai Z, Osterman AL, Smith JW.PLoS One. 2012;7(9):e45190. Epub 2012 Sep 14.

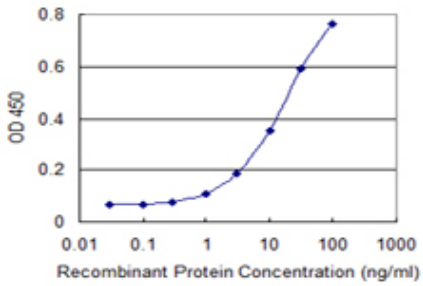
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .



ALDH18A1 monoclonal antibody (M01), clone 2B5
Western Blot analysis of ALDH18A1 expression in MCF-7 ((Cat # AT1110a)



Detection limit for recombinant GST tagged ALDH18A1 is 0.3 ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.