

ALDH18A1 Antibody (monoclonal) (M01)**Mouse monoclonal antibody raised against a partial recombinant ALDH18A1.****Catalog # AT1110a****Specification**

ALDH18A1 Antibody (monoclonal) (M01) - Product Information

| | |
|-------------------|---------------------------|
| Application | WB, E |
| Primary Accession | P54886 |
| Other Accession | NM_002860 |
| Reactivity | Human |
| Host | mouse |
| Clonality | Monoclonal |
| Isotype | IgG2b Kappa |
| Calculated MW | 87302 |

ALDH18A1 Antibody (monoclonal) (M01) - 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

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.

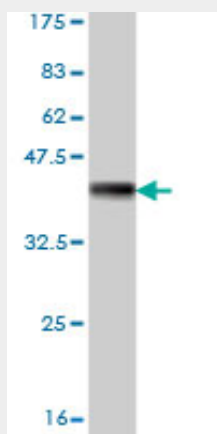
ALDH18A1 Antibody (monoclonal) (M01) - Protocols

Provided below are standard protocols that you may find useful for product applications.

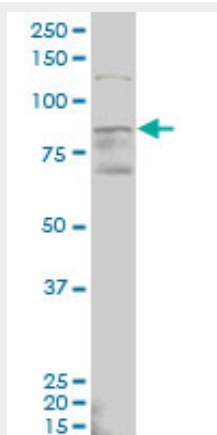
- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

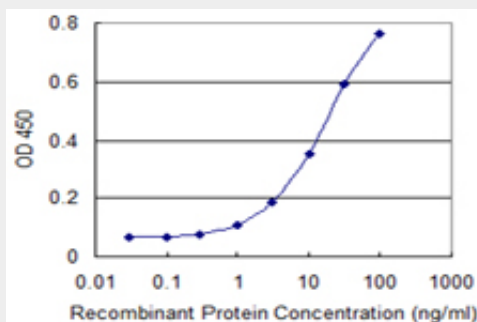
ALDH18A1 Antibody (monoclonal) (M01) - Images



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.

ALDH18A1 Antibody (monoclonal) (M01) - 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.

ALDH18A1 Antibody (monoclonal) (M01) - 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, Pellicchia M, Ronai Z, Osterman AL, Smith JW.PLoS One. 2012;7(9):e45190. Epub 2012 Sep 14.