

ALAS1 Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a partial recombinant ALAS1.

Catalog # AT1106a

Specification

ALAS1 Antibody (monoclonal) (M03) - Product Information

Application	WB, E
Primary Accession	P13196
Other Accession	NM_000688
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG2a Kappa
Calculated MW	70581

ALAS1 Antibody (monoclonal) (M03) - Additional Information

Gene ID 211

Other Names

5-aminolevulinate synthase, nonspecific, mitochondrial, ALAS-H, 5-aminolevulinic acid synthase 1, Delta-ALA synthase 1, Delta-aminolevulinate synthase 1, ALAS1, ALAS3, ALASH

Target/Specificity

ALAS1 (NP_000679, 1 a.a. ~ 98 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

ALAS1 Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

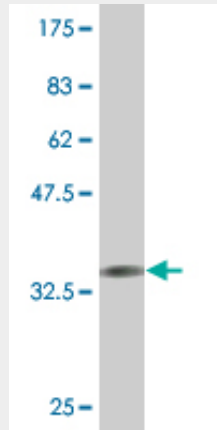
ALAS1 Antibody (monoclonal) (M03) - Protocols

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

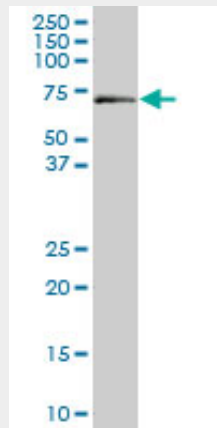
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

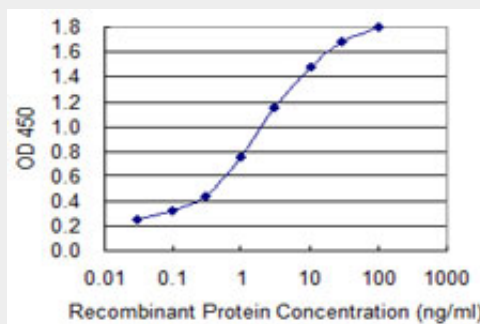
ALAS1 Antibody (monoclonal) (M03) - Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.52 KDa) .



ALAS1 monoclonal antibody (M03), clone 2D5. Western Blot analysis of ALAS1 expression in COLO 320 HSR ((Cat # AT1106a)



Detection limit for recombinant GST tagged ALAS1 is 0.03 ng/ml as a capture antibody.

ALAS1 Antibody (monoclonal) (M03) - Background

Delta-aminolevulinate synthase (ALAS; EC 2.3.1.37) catalyzes the condensation of glycine with succinyl-CoA to form delta-aminolevulinic acid. This nuclear-encoded mitochondrial enzyme is the first and rate-limiting enzyme in the mammalian heme biosynthetic pathway. There are 2 tissue-specific isozymes: a housekeeping enzyme encoded by the ALAS1 gene and an erythroid tissue-specific enzyme encoded by ALAS2 (MIM 301300).

ALAS1 Antibody (monoclonal) (M03) - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086. New genetic associations detected in a host response study to hepatitis B vaccine. Davila S, et al. Genes Immun, 2010 Apr. PMID 20237496. Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. Talmud PJ, et al. Am J Hum Genet, 2009 Nov. PMID 19913121. Down-regulation of aminolevulinate synthase, the rate-limiting enzyme for heme biosynthesis in Alzheimer's disease. Dwyer BE, et al. Neurosci Lett, 2009 Aug 28. PMID 19477221. Peroxisome proliferator-activated receptor alpha controls hepatic heme biosynthesis through ALAS1. Degenhardt T, et al. J Mol Biol, 2009 May 1. PMID 19289130.