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ALAS1 Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a partial recombinant ALAS1.
Catalog # AT1106a

Product Information

Application	WB, E
Primary Accession	P13196
Other Accession	NM_000688
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	2D5
Calculated MW	70581

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

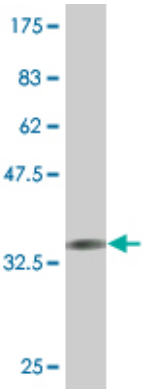
Background

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).

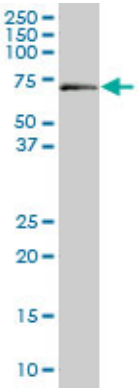
References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-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.

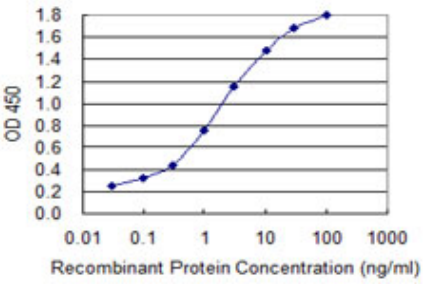
Images



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.

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