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ALAS2 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant ALAS2.
Catalog # AT1108a

Product Information

Application	WB, E
Primary Accession	P22557
Other Accession	NM_000032
Reactivity	Human, Mouse
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	4D8
Calculated MW	64633

Additional Information

Gene ID	212
Other Names	5-aminolevulinate synthase, erythroid-specific, mitochondrial, ALAS-E, 5-aminolevulinic acid synthase 2, Delta-ALA synthase 2, Delta-aminolevulinate synthase 2, ALAS2, ALASE, ASB
Target/Specificity	ALAS2 (NP_000023, 1 a.a. ~ 100 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	ALAS2 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

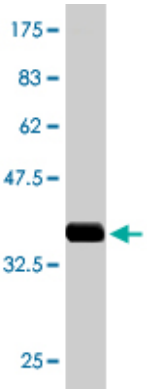
The product of this gene specifies an erythroid-specific mitochondrially located enzyme. The encoded protein catalyzes the first step in the heme biosynthetic pathway. Defects in this gene cause X-linked pyridoxine-responsive sideroblastic anemia. Alternatively spliced transcript variants encoding different isoforms have been identified.

References

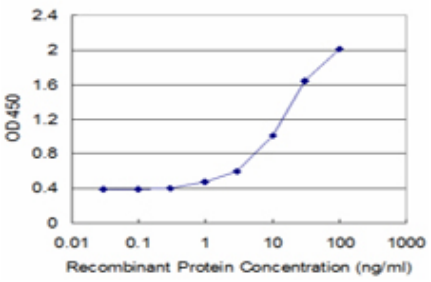
Systematic molecular genetic analysis of congenital sideroblastic anemia: evidence for genetic heterogeneity

and identification of novel mutations. Bergmann AK, et al. Pediatr Blood Cancer, 2010 Feb. PMID 19731322.Hypoxia induces erythroid-specific 5-aminolevulinate synthase expression in human erythroid cells through transforming growth factor-beta signaling. Kaneko K, et al. FEBS J, 2009 Mar. PMID 19187226.Multi-organ iron overload in an African-American man with ALAS2 R452S and SLC40A1 R561G. Sussman NL, et al. Acta Haematol, 2008. PMID 19066423.C-terminal deletions in the ALAS2 gene lead to gain of function and cause X-linked dominant protoporphyria without anemia or iron overload. Whatley SD, et al. Am J Hum Genet, 2008 Sep. PMID 18760763.Lack of association of delta-aminolevulinate dehydratase polymorphisms with blood lead levels and hemoglobin in Romanian women from a lead-contaminated region. Rabstein S, et al. J Toxicol Environ Health A, 2008. PMID 18569569.

Images



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



Detection limit for recombinant GST tagged ALAS2 is approximately 0.3ng/ml as a capture antibody.