

ALAS2 Antibody (monoclonal) (M02)**Mouse monoclonal antibody raised against a partial recombinant ALAS2.****Catalog # AT1108a****Specification**

ALAS2 Antibody (monoclonal) (M02) - Product Information

Application	WB, E
Primary Accession	P22557
Other Accession	NM_000032
Reactivity	Human, Mouse
Host	mouse
Clonality	Monoclonal
Isotype	IgG2a Kappa
Calculated MW	64633

ALAS2 Antibody (monoclonal) (M02) - 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

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.

ALAS2 Antibody (monoclonal) (M02) - Protocols

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

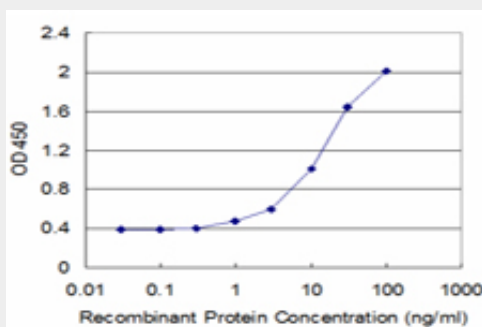
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

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

ALAS2 Antibody (monoclonal) (M02) - 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.

ALAS2 Antibody (monoclonal) (M02) - 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.

ALAS2 Antibody (monoclonal) (M02) - 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.