

Product Name: KD-Validated ALAS1 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01616**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 70.6kDa

Antigen Information

Gene Name	ALAS1 ALAS1; 5'-Aminolevulinate Synthase 1; ALAS-H; ALAS3; 5-Aminolevulinate Synthase, Non-Specific, Mitochondrial; Aminolevulinate, Delta-, Synthase 1; 5-Aminolevulinic Acid Synthase
Alternative Names	1; Delta-Aminolevulinate Synthase 1; Delta-ALA Synthase 1; EC 2.3.1.37; ALASH; ALAS; 5-Aminolevulinate Synthase, Nonspecific, Mitochondrial; Migration-Inducing Protein 4; EC 2.3.1; MIG4
Gene ID	211.0
SwissProt ID	P13196
Immunogen	A synthesized peptide derived from human Alas1

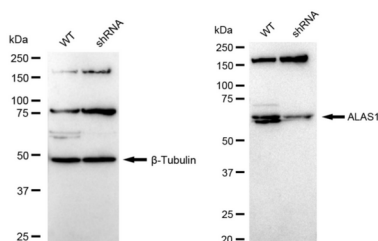
Background

This gene encodes the mitochondrial enzyme which catalyzes the rate-limiting step in heme (iron-protoporphyrin) biosynthesis. The enzyme encoded by this gene is the housekeeping enzyme; a separate gene encodes a form of the enzyme that is specific for erythroid tissue. The level of the mature encoded protein is regulated by heme: high levels of heme down-regulate the mature enzyme in mitochondria while low heme levels up-regulate. A pseudogene of this gene is located on chromosome 12. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jan 2015]

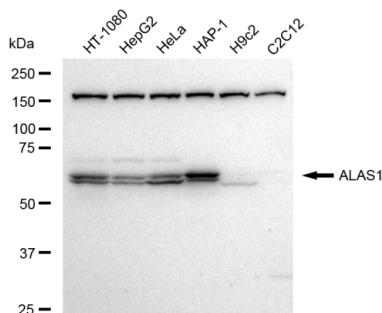
Research Area

Cardiovascular,Signal Transduction,Metabolism

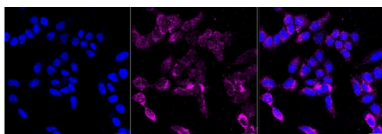
Image Data



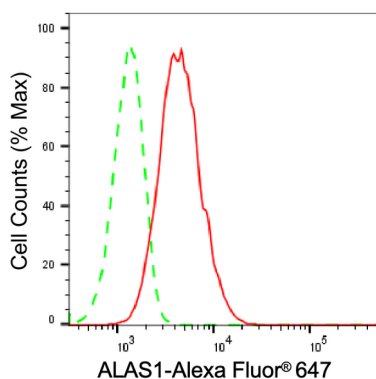
Western blotting analysis using ALAS1 antibody (KVAb01616). ALAS1 expression in wild type (WT) and ALAS1 shRNA knockdown (KD) HeLa cells with 30 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with ALAS1 antibody (KVAb01616, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using ALAS1 antibody (KVAb01616). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ALAS1 antibody (KVAb01616, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HAP-1 cells with ALAS1 antibody (KVAb01616, 1:1,000). Nuclei were stained blue with DAPI; ALAS1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 μ m.



Flow cytometric analysis of ALAS1 expression in HAP-1 cells using ALAS1 antibody (KVAb01616, 1:2,000). Green, isotype control; red, ALAS1.