

## Alas1 Rabbit mAb

Catalog No: #48613



Package Size: #48613-1 50ul #48613-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

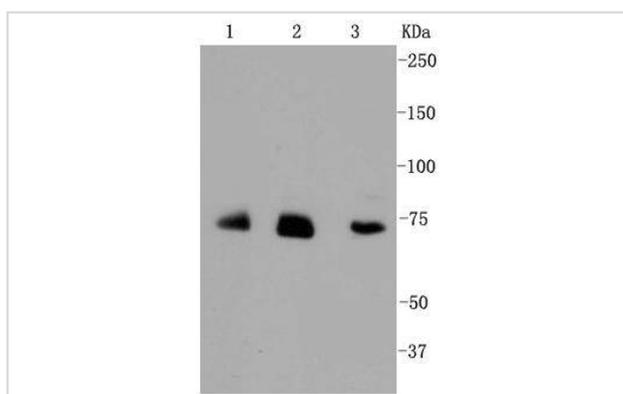
## Description

Product Name	Alas1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SA70-04
Purification	ProA affinity purified
Applications	WB, ICC/IF
Species Reactivity	Human
Immunogen Description	recombinant protein
Conjugates	Unconjugated
Other Names	5 aminolevulinate synthase antibody 5 aminolevulinate synthase nonspecific mitochondrial antibody 5 aminolevulinic acid synthase antibody 5-aminolevulinate synthase antibody 5-aminolevulinic acid synthase 1 antibody Alas 1 antibody ALAS 3 antibody ALAS antibody ALAS H antibody ALAS HOUSEKEEPING TYPE antibody ALAS N antibody ALAS-H antibody alaS1 antibody ALAS3 antibody ALASH antibody Aminolevulinate delta synthase 1 antibody Aminolevulinic acid synthase 1 antibody Delta ALA synthetase antibody Delta aminolevulinate synthase antibody Delta-ALA synthase 1 antibody Delta-aminolevulinate synthase 1 antibody HEM1_HUMAN antibody MIG 4 antibody MIG4 antibody Migration inducing protein 4 antibody mitochondrial antibody nonspecific antibody
Accession No.	Swiss-Prot#:P13196
Calculated MW	71 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

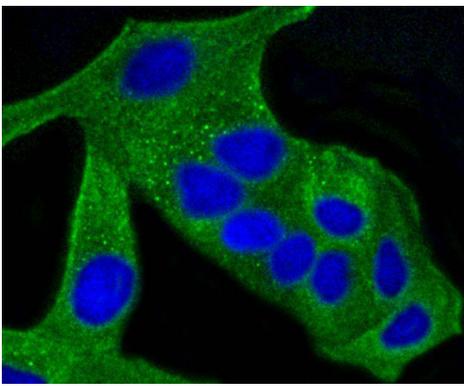
## Application Details

WB: 1:1,000-5,000 ICC: 1:50-1:200

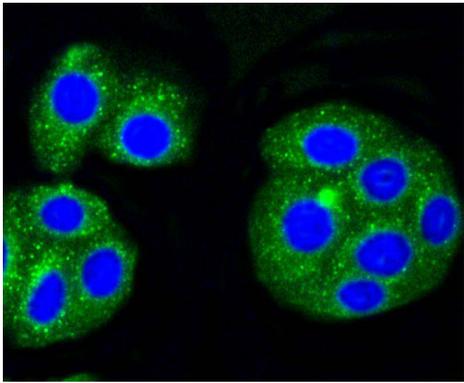
## Images



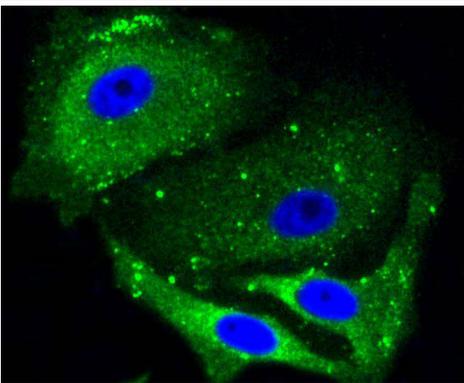
Western blot analysis of Alas1 on different cell lysates using anti-Alas1 antibody at 1/1,000 dilution. Positive control: Lane 1: JAR Lane 2: HUVEC Lane 3: Hela



ICC staining Alas1 in HeLa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Alas1 in HepG2 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Alas1 in MCF-7 cells (green). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

## Background

5-aminolevulinic acid synthase 1 (ALAS-H) and 2 (ALAS-E) are two isoforms of ALAS, an enzyme catalyzing the first step of the heme biosynthetic pathway in mammals. The erythroid-specific isoenzyme, ALAS-E, regulates the first step of hematopoietic cell differentiation and iron metabolism in the liver. ALAS-H is a housekeeping protein which mediates synthesis of early heme in the mitochondria of most cells. Succinyl CoA associates with ALAS-E in protein conformation change and translocation of ALAS-E into the mitochondria and does not interact with ALAS-H. The ALAS-E 5'-flanking region contains binding sites for nuclear activators such as GATA-1, NF-E2 and EKLf. Since the ALAS gene maps to the X chromosome, mutation of the gene leads to the pyridoxine-refractory X-linked sideroblastic anemia.

## References

1. The MGC Project Team. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). *Genome Res.* 14:2121-2127(2004).
2. Bishop D.F. Two different genes encode delta-aminolevulinic acid synthase in humans: nucleotide sequences of cDNAs for the housekeeping and erythroid genes. *Nucleic Acids Res.* 18:7187-7188(1990).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.