

Product datasheet

Anti-Alas1 antibody [EPR10247] - Mitochondrial Marker ab154860

KO VALIDATED Recombinant RabMAb

★★★★★ [1 Abreviews](#) [6 References](#) [7 Images](#)

Overview

| | |
|---------------------|--|
| Product name | Anti-Alas1 antibody [EPR10247] - Mitochondrial Marker |
| Description | Rabbit monoclonal [EPR10247] to Alas1 - Mitochondrial Marker |
| Host species | Rabbit |
| Tested applications | Suitable for: WB, ICC/IF Unsuitable for: IHC-P |
| Species reactivity | Reacts with: Human |
| Immunogen | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. |
| Positive control | WB: HeLa, HEK-293, HepG2, K562, JAR and Raji cell lysate. ICC/IF: HepG2 cells. |
| General notes | This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here . Our RabMAb [®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents . |

Properties

| | |
|----------------------|---|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. |
| Storage buffer | Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, 59% PBS |
| Purity | Protein A purified |
| Clonality | Monoclonal |
| Clone number | EPR10247 |
| Isotype | IgG |

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab154860 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|-------------|-----------|---|
| WB | ★★★★★ (1) | 1/1000 - 1/10000. Predicted molecular weight: 71 kDa. |
| ICC/IF | | 1/100 - 1/500. |

Application notes

Is unsuitable for IHC-P.

Target

Pathway

Porphyrin metabolism; protoporphyrin-IX biosynthesis; 5-aminolevulinate from glycine: step 1/1.

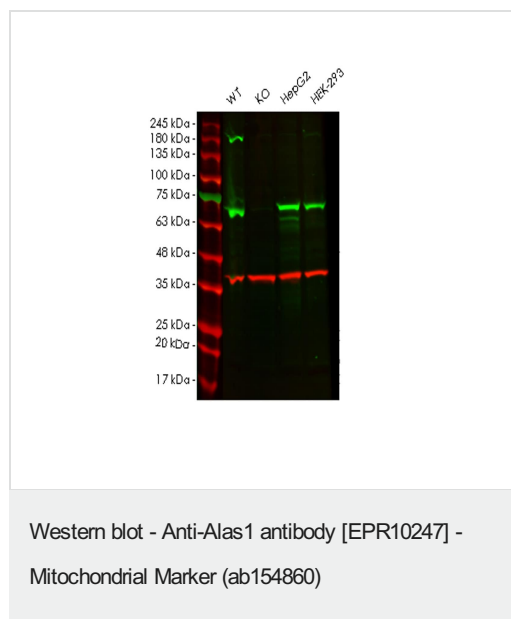
Sequence similarities

Belongs to the class-II pyridoxal-phosphate-dependent aminotransferase family.

Cellular localization

Mitochondrion matrix.

Images



All lanes : Anti-Alas1 antibody [EPR10247] - Mitochondrial Marker (ab154860) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : ALAS1 knockout HeLa cell lysate

Lane 3 : HepG2 cell lysate

Lane 4 : HEK-293 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

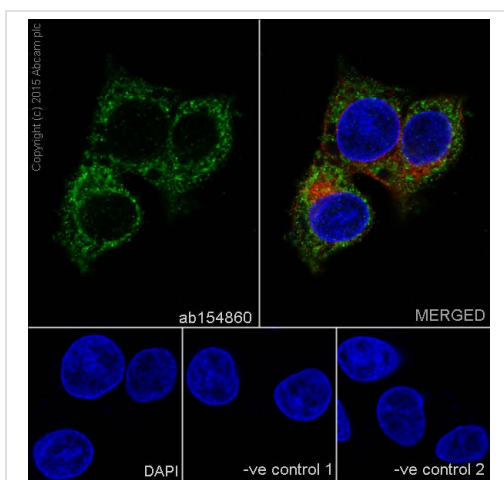
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) at 1/10000 dilution

Predicted band size: 71 kDa

Observed band size: 71 kDa

Lanes 1-4: Merged signal (red and green). Green - ab154860 observed at 71 kDa. Red - loading control **ab8245** observed at 36 kDa.

ab154860 Anti-Alas1 antibody [EPR10247] was shown to specifically react with Alas1 in wild-type HeLa cells. Loss of signal was observed when knockout cell line **ab266473** (knockout cell lysate **ab257348**) was used. Wild-type and Alas1 knockout samples were subjected to SDS-PAGE. ab154860 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

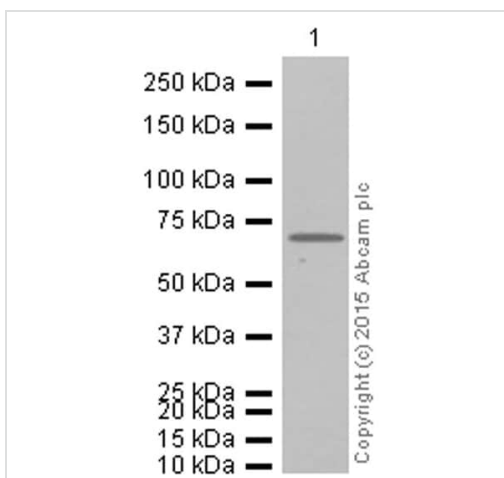


Immunocytochemistry/ Immunofluorescence - Anti-Alas1 antibody [EPR10247] - Mitochondrial Marker (ab154860)

Immunocytochemistry/Immunofluorescence analysis of HepG2 cells labelling Alas1 with purified ab154860 at a dilution of 1/100. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. **ab7291**, a mouse anti-tubulin (1/1000) and **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000) were also used.

Control 1: primary antibody (1/100) and secondary antibody, **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000).

Control 2: **ab7291** (1/1000) and secondary antibody, **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000).



Western blot - Anti-Alas1 antibody [EPR10247] - Mitochondrial Marker (ab154860)

Anti-Alas1 antibody [EPR10247] - Mitochondrial Marker (ab154860) at 1/10000 dilution (purified) + HepG2 whole cell lysate at 10 µg

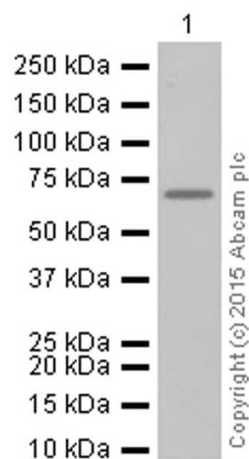
Secondary

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 71 kDa

Observed band size: 71 kDa

Blocking and dilution buffer: 5% NFDM/TBST



Western blot - Anti-Alas1 antibody [EPR10247] - Mitochondrial Marker (ab154860)

Anti-Alas1 antibody [EPR10247] - Mitochondrial Marker (ab154860) at 1/10000 dilution (purified) + Raji whole cell lysate at 10 µg

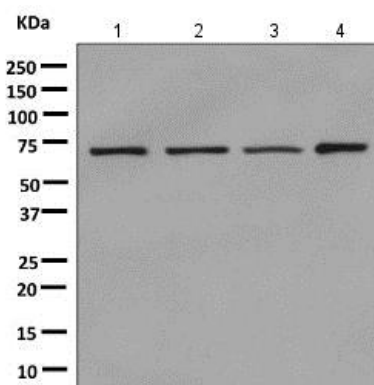
Secondary

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 71 kDa

Observed band size: 71 kDa

Blocking and dilution buffer: 5% NFDm/TBST



Western blot - Anti-Alas1 antibody [EPR10247] - Mitochondrial Marker (ab154860)

All lanes : Anti-Alas1 antibody [EPR10247] - Mitochondrial Marker (ab154860) at 1/1000 dilution (unpurified)

Lane 1 : HepG2 cell lysate

Lane 2 : K562 cell lysate

Lane 3 : JAR cell lysate

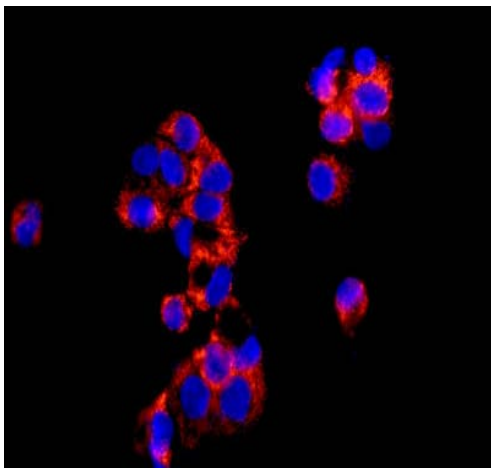
Lane 4 : Raji cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP-conjugated goat anti-rabbit IgG at 1/2000 dilution

Predicted band size: 71 kDa



Immunocytochemistry/Immunofluorescence analysis of HepG2 cells labeling Alas1 with unpurified ab154860 at a dilution of 1/250.

Immunocytochemistry/ Immunofluorescence - Anti-Alas1 antibody [EPR10247] - Mitochondrial Marker (ab154860)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Alas1 antibody [EPR10247] - Mitochondrial Marker (ab154860)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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