abcam

Product datasheet

Anti-ALAS2/ASB antibody [EPR15112(B)] - C-terminal ab184964

Recombinant RabMAb

1 Abreviews 8 References 6 Images

Overview

Product name	Anti-ALAS2/ASB antibody [EPR15112(B)] - C-terminal
Description	Rabbit monoclonal [EPR15112(B)] to ALAS2/ASB - C-terminal
Host species	Rabbit
Tested applications	**Suitable for:** WB, IP
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: NIH/3T3, PC-12, Rat brain, Jurkat, 293 and Human fetal liver. IP: K-562 cells.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - 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 long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR15112(B)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab184964 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		1/1000 - 1/2000. Detects a band of approximately 65 kDa (predicted molecular weight: 65 kDa).
IP		1/30 - 1/50.

Target

Tissue specificity Erythroid specific.

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

Involvement in disease Defects in ALAS2 are a cause of anemia sideroblastic X-linked (XLSA) [MIM:300751]. Sideroblastic anemia is characterized by anemia of varying severity, hypochromic peripheral erythrocytes, systemic iron overload secondary to chronic ineffective erythropoiesis, and the presence of bone marrow ringed sideroblasts. Sideroblasts are characterized by iron-loaded mitochondria clustered around the nucleus. XLSA shows a variable hematologic response to pharmacologic doses of pyridoxine.
Defects in ALAS2 are the cause of erythropoietic protoporphyria X-linked dominant (XLDPT) [MIM:300752]. Porphyrias are inherited defects in the biosynthesis of heme, resulting in the accumulation and increased excretion of porphyrins or porphyrin precursors. They are classified as erythropoietic or hepatic, depending on whether the enzyme deficiency occurs in red blood cells or in the liver. XLDPT is a form of porphyria characterized biochemically by a high proportion of zinc-protoporphyrin in erythrocytes, in which a mismatch between protoporphyrin production and the heme requirement of differentiating erythroid cells leads to overproduction of protoporphyrin in amounts sufficient to cause photosensitivity and liver disease. Note=Gain of function mutations in ALS2 are responsible for XLDPT, but they can also be a possible aggravating factor in congenital erythropoietic porphyria and other erythropoietic disorders caused by mutations in other genes (PubMed:21309041).

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

Cellular localization Mitochondrion matrix.

Images

Western blot - Anti-ALAS2/ASB antibody [EPR15112(B)] - C-terminal (ab184964)

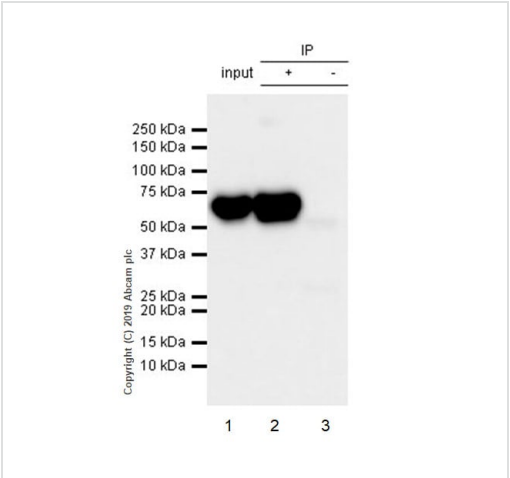
All lanes : Anti-ALAS2/ASB antibody [EPR15112(B)] - C-terminal (ab184964) at 1/1000 dilution (Purified)

Lane 1 : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates
Lane 2 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysates
Lane 3 : Rat brain lysates

Lysates/proteins at 15 µg per lane.

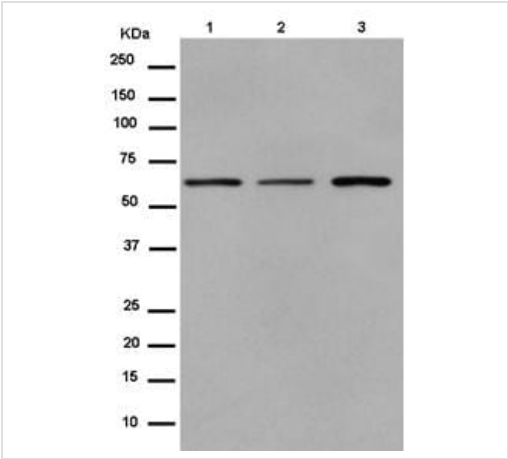
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 65 kDa
Observed band size: 65 kDa



Immunoprecipitation - Anti-ALAS2/ASB antibody [EPR15112(B)] - C-terminal (ab184964)

ab184964 (Purified) at 1:30 dilution (2 µg) immunoprecipitating ALAS2/ASB in K-562 whole cell lysate.
Lane 1 (input): K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate 10 µg
Lane 2 (+): ab184964 & K-562 whole cell lysate
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab184964 in K-562 whole cell lysate
For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used at 1:1000 dilution.
Blocking and diluting buffer: 5% NFDM/TBST.



Western blot - Anti-ALAS2/ASB antibody [EPR15112(B)] - C-terminal (ab184964)

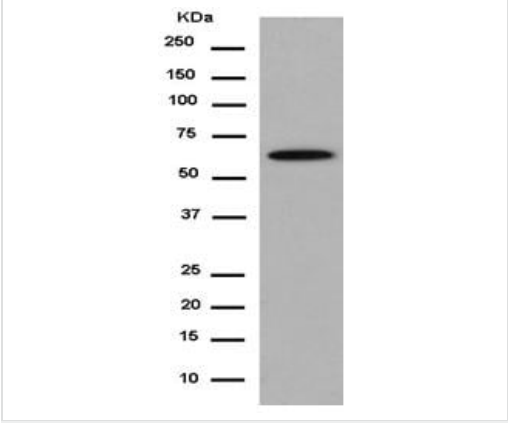
All lanes : Anti-ALAS2/ASB antibody [EPR15112(B)] - C-terminal (ab184964) at 1/1000 dilution

Lane 1 : K562 lysate
Lane 2 : Jurkat lysate
Lane 3 : 293 lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 65 kDa

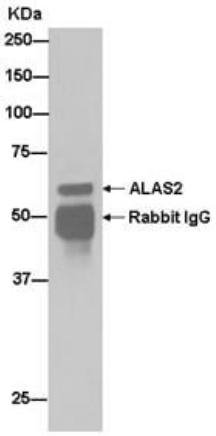


Western blot - Anti-ALAS2/ASB antibody [EPR15112(B)] - C-terminal (ab184964)

Anti-ALAS2/ASB antibody [EPR15112(B)] - C-terminal (ab184964) at 1/1000 dilution + Human fetal liver at 10 µg

Secondary
Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 65 kDa



Immunoprecipitation - Anti-ALAS2/ASB antibody [EPR15112(B)] - C-terminal (ab184964)

Western blot analysis of immunoprecipitation pellet from 293 cell lysate immunoprecipitated using ab184964 at 1/50 dilution.

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated secondary used at a 1/1000 dilution.

Anti-ALAS2/ASB antibody [EPR15112(B)] - C-terminal (ab184964)

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors