# abcam

# Product datasheet

# Anti-SUCLA2 antibody [EPR14924] ab202582

Recombinant RobMAb

2 References 9 Images

Overview

Product name Anti-SUCLA2 antibody [EPR14924]

**Description** Rabbit monoclonal [EPR14924] to SUCLA2

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), ICC/IF, IHC-P, WB

Species reactivity Reacts with: Mouse, Rat, Human

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: 293, HeLa, HepG2, C6, RAW 264.7, PC-12 and NIH/3T3 whole cell lysates; mouse and rat

brain, heart, kidney and spleen lysates. IHC-P: human cervix carcinoma, mouse cardiac muscle

and rat pancreas tissues; ICC/IF: HeLa cells. Flow Cyt (intra): HeLa 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<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **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: 40% Glycerol (glycerin, glycerine), 59% PBS, 0.05% BSA

Purity Protein A purified

Clonality Monoclonal
Clone number EPR14924

1

**Isotype** IgG

### **Applications**

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab202582 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	
Flow Cyt (Intra)		1/200.	
ICC/IF		1/1800.	
IHC-P		1/1800. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.	
WB		1/1000. Detects a band of approximately 43 kDa (predicted molecular weight: 50 kDa).	

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**Function** Catalyzes the ATP-dependent ligation of succinate and CoA to form succinyl-CoA.

**Tissue specificity** Widely expressed. Not expressed in liver and lung.

**Pathway** Carbohydrate metabolism; tricarboxylic acid cycle; succinate from succinyl-CoA (ligase route):

step 1/1.

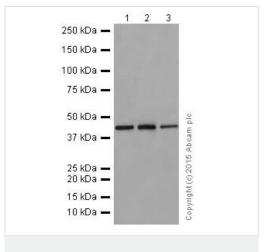
Involvement in disease Mitochondrial DNA depletion syndrome 5

**Sequence similarities**Belongs to the succinate/malate CoA ligase beta subunit family.

Contains 1 ATP-grasp domain.

Cellular localization Mitochondrion.

## **Images**



Western blot - Anti-SUCLA2 antibody [EPR14924] (ab202582)

**All lanes :** Anti-SUCLA2 antibody [EPR14924] (ab202582) at 1/1000 dilution

**Lane 1 :** 293 (Human epithelial cells from embryonic kidney) whole cell lysate

**Lane 2**: HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate

**Lane 3**: HepG2 (Human liver hepatocellular carcinoma) whole cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

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

**Predicted band size:** 50 kDa **Observed band size:** 43 kDa

Exposure time: 1 minute

Blocking/Dilution buffer: 5% NFDM/TBST.

1 2 3 4 5 6 7 8 9 10 11 12
250 kDa —
150 kDa —
100 kDa —
75 kDa —
37 kDa —
25 kDa —
20 kDa —
15 kDa —
115 kDa —
10 kDa —

Western blot - Anti-SUCLA2 antibody [EPR14924] (ab202582)

**All lanes :** Anti-SUCLA2 antibody [EPR14924] (ab202582) at 1/1000 dilution

Lane 1: Mouse brain lysate

Lane 2: Mouse heart lysate

Lane 3: Mouse kidney lysate

Lane 4 : Mouse spleen lysate

Lane 5: Rat brain lysate

Lane 6: Rat heart lysate

Lane 7: Rat kidney lysate

Lane 8: Rat spleen lysate

Lane 9: C6 (Rat glial tumor cells) whole cell lysate

Lane 10: RAW 264.7 (Mouse macrophage cells transformed with

Abelson murine leukemia virus) whole cell lysate

Lane 11: PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate

Lane 12: NIH/3T3 (Mouse embyro fibroblast cells) whole cell lysate

Lysates/proteins at 10 µg per lane.

#### **Secondary**

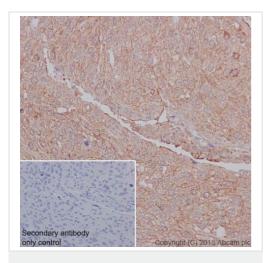
**All lanes :** Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at

1/1000 dilution

**Predicted band size:** 50 kDa **Observed band size:** 43 kDa

Exposure time: 15 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

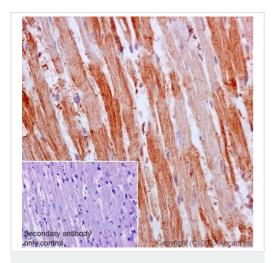


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SUCLA2 antibody
[EPR14924] (ab202582)

Immunohistochemical analysis of paraffin-embedded Human cervix carcinoma tissue labeling SUCLA2 with ab202582 at 1/1800 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasmic staining on Human cervix carcinoma tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

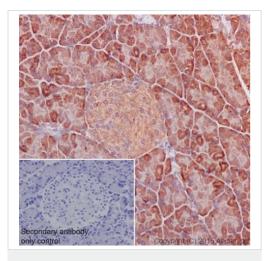


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SUCLA2 antibody
[EPR14924] (ab202582)

Immunohistochemical analysis of paraffin-embedded Mouse cardiac muscle tissue labeling SUCLA2 with ab202582 at 1/1800 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasmic staining on mouse cardiac muscle tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

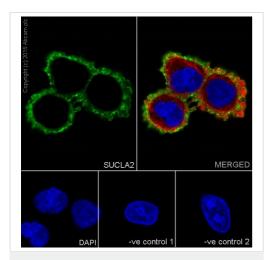


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SUCLA2 antibody
[EPR14924] (ab202582)

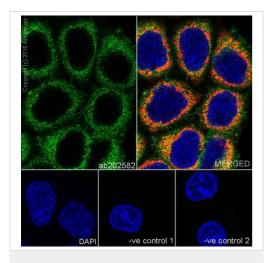
Immunohistochemical analysis of paraffin-embedded rat pancreas tissue labeling SUCLA2 with ab202582 at 1/1800 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasmic staining on rat pancreas tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-SUCLA2 antibody [EPR14924] (ab202582)



Immunocytochemistry/ Immunofluorescence - Anti-SUCLA2 antibody [EPR14924] (ab202582)

Immunofluorescent analysis of 100% methanol-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling SUCLA2 with ab202582 at 1/1800 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/500 dilution (green). The nuclear counter stain is DAPI (blue). Tubulin is detected with ab7291 (Anti-Tubulin mouse MAb) at 1/1000 dilution and ab150120 (AlexaFluor®594 Goat Anti-Mouse secondary) at 1/500 dilution (red).

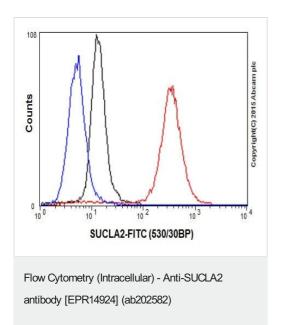
The negative controls are as follows:

-ve control 1: ab202582 at 1/1800 dilution followed by <u>ab150120</u> (AlexaFluor®594 Goat Anti-Mouse secondary) at 1/500 dilution. -ve control 2: <u>ab7291</u> (Anti-Tubulin mouse MAb) at 1/1000 dilution followed by <u>ab150077</u> (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/500 dilution.

Immunofluorescent analysis of 100% methanol-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling SUCLA2 with ab202582 at 1/1800 dilution, followed by Goat Anti-Rabbit IgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/500 dilution (green). Confocal image showing cytoplasm staining on HeLa cell line. The nuclear counter stain is DAPI (blue). COX IV is detected with ab33985 (anti-COX IV mouse mAb) at 1/1000 dilution and ab150120 (AlexaFluor®594 Goat Anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows:

-ve control 1: ab202582 at 1/1800 dilution followed by <u>ab150120</u> (AlexaFluor®594 Goat Anti-Mouse secondary) at 1/500 dilution.
-ve control 2: <u>ab33985</u> (Anti-COX IV mouse MAb) at 1/1000 dilution followed by <u>ab150077</u> (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/500 dilution.



Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling SUCLA2 with ab202582 at 1/200 dilution (red) compared with a rabbit monoclonal IgG isotype control (ab172730; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (FITC) at 1/500 dilution was used as the secondary antibody.



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