

## Product datasheet

### Anti-ACSL1 antibody [EPR13498] ab178419

KO VALIDATED

Recombinant

RabMAb

[1 References](#) [6 Images](#)

#### Overview

<b>Product name</b>	Anti-ACSL1 antibody [EPR13498]
<b>Description</b>	Rabbit monoclonal [EPR13498] to ACSL1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, WB <b>Unsuitable for:</b> Flow Cyt or IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Does not react with:</b> Mouse, Rat
<b>Immunogen</b>	Synthetic peptide within Human ACSL1 aa 100-200 (Cysteine residue). The exact sequence is proprietary. Database link: <a href="#">P33121</a>
<b>Positive control</b>	Human fetal liver, heart and kidney lysates; HeLa and HepG2 cell lysates; Human heart, kidney and liver tissue.
<b>General notes</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant

<b>Purity</b>	Tissue culture supernatant
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR13498
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab178419 in the following tested applications.

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

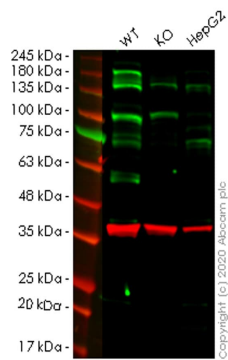
Application	Abreviews	Notes
<b>IHC-P</b>		1/50 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
<b>WB</b>		1/1000 - 1/5000. Predicted molecular weight: 78 kDa.

**Application notes** Is unsuitable for Flow Cyt or IP.

## Target

<b>Function</b>	Activation of long-chain fatty acids for both synthesis of cellular lipids, and degradation via beta-oxidation. Preferentially uses palmitoleate, oleate and linoleate.
<b>Tissue specificity</b>	Highly expressed in liver, heart, skeletal muscle, kidney and erythroid cells, and to a lesser extent in brain, lung, placenta and pancreas.
<b>Sequence similarities</b>	Belongs to the ATP-dependent AMP-binding enzyme family.
<b>Developmental stage</b>	Expressed during the early stages of erythroid development while expression is very low in reticulocytes and young erythrocytes.
<b>Cellular localization</b>	Mitochondrion outer membrane. Peroxisome membrane. Microsome membrane. Endoplasmic reticulum membrane.

## Images



Western blot - Anti-ACSL1 antibody [EPR13498]  
(ab178419)

**All lanes** : Anti-ACSL1 antibody [EPR13498] (ab178419) at 1/1000 dilution

**Lane 1** : Wild-type HeLa cell lysate

**Lane 2** : ACSL1 knockout HeLa cell lysate

**Lane 3** : HepG2 cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

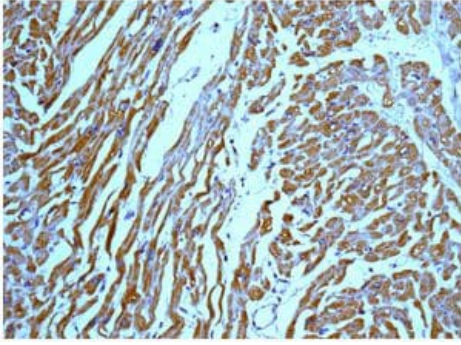
**All lanes** : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

**Predicted band size:** 78 kDa

**Observed band size:** 78 kDa

**Lanes 1-3:** Merged signal (red and green). Green - ab178419 observed at 78 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

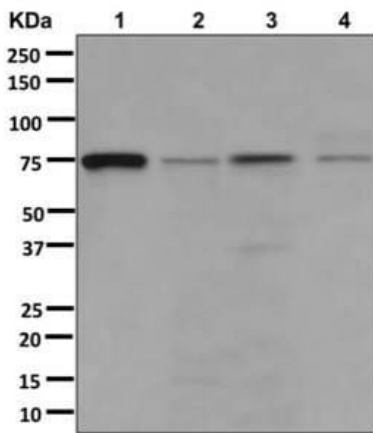
ab178419 Anti-ACSL1 antibody [EPR13498] was shown to specifically react with ACSL1 in wild-type HeLa cells. Loss of signal was observed when knockout cell line [ab265555](#) (knockout cell lysate [ab257335](#)) was used. Wild-type and ACSL1 knockout samples were subjected to SDS-PAGE. ab178419 and Anti-GAPDH 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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ACSL1 antibody [EPR13498] (ab178419)

Immunohistochemical analysis of paraffin-embedded Human heart tissue labeling ACSL1 with ab178419 at 1/50 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Western blot - Anti-ACSL1 antibody [EPR13498] (ab178419)

**All lanes :** Anti-ACSL1 antibody [EPR13498] (ab178419) at 1/1000 dilution

**Lane 1 :** Human fetal liver lysate

**Lane 2 :** Human fetal heart lysate

**Lane 3 :** Human fetal kidney lysate

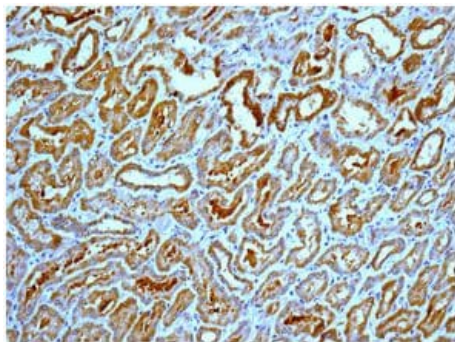
**Lane 4 :** HepG2 cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes :** Goat anti-rabbit HRP at 1/2000 dilution

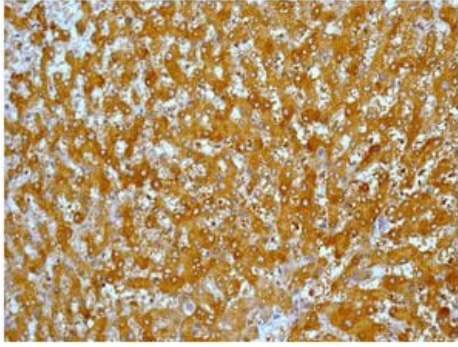
**Predicted band size:** 78 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ACSL1 antibody [EPR13498] (ab178419)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling ACSL1 with ab178419 at 1/50 dilution

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling ACSL1 with ab178419 at 1/50 dilution

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ACSL1 antibody [EPR13498] (ab178419)

Why choose a recombinant antibody?



Anti-ACSL1 antibody [EPR13498] (ab178419)

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

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