abcam

Product datasheet

Anti-OXCT1/SCOT antibody ab224250

KO VALIDATED

1 References 8 Images

Overview

Product name	Anti-OXCT1/SCOT antibody
Description	Rabbit polyclonal to OXCT1/SCOT
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, WB, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human **Predicted to work with:** Pig
Immunogen	Recombinant fragment corresponding to Human OXCT1/SCOT aa 50-250. Database link: **P55809** Run BLAST with Run BLAST with
Positive control	WB: HeLa, NIH/3T3, Jurkat and NBT-II cell lysates; human liver, heart, testis and kidney tissue lysates. IHC-P: Human heart muscle tissue. ICC/IF: A431 cells.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

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: 7.20 Preservative: 0.02% Sodium azide Constituents: 40% Glycerol, PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal

Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab224250 in the following tested applications.

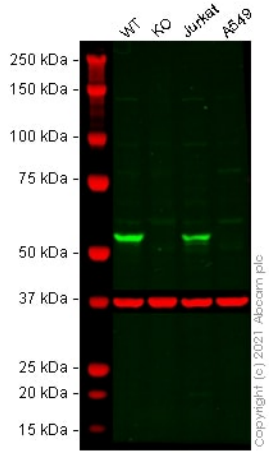
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/200 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		Use a concentration of 0.04 - 0.4 µg/ml. Predicted molecular weight: 56 kDa.
ICC/IF		Use a concentration of 0.25 - 2 µg/ml. Fixation/Permeabilization: PFA/Triton X-100.

Target

Function	Key enzyme for ketone body catabolism. Transfers the CoA moiety from succinate to acetoacetate. Formation of the enzyme-CoA intermediate proceeds via an unstable anhydride species formed between the carboxylate groups of the enzyme and substrate.
Tissue specificity	Abundant in heart, followed in order by kidney, brain, and muscle, whereas in liver it is undetectable; also detectable in leukocytes and fibroblasts.
Pathway	Ketone metabolism; succinyl-CoA degradation; acetoacetyl-CoA from succinyl-CoA: step 1/1.
Involvement in disease	Succinyl-CoA:3-oxoacid CoA transferase deficiency
Sequence similarities	Belongs to the 3-oxoacid CoA-transferase family.
Cellular localization	Mitochondrion matrix.

Images



Western blot - Anti-OXCT1/SCOT antibody (ab224250)

All lanes : Anti-OXCT1/SCOT antibody (ab224250) at 0.04 µg/ml

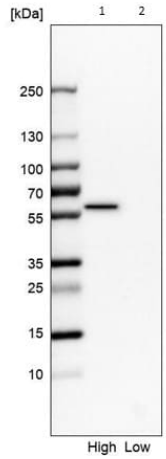
Lane 1 : Wild-type HeLa cell lysate
Lane 2 : OXCT1 knockout HeLa cell lysate
Lane 3 : Jurkat cell lysate
Lane 4 : A549 cell lysate

Lysates/proteins at 18 µg per lane.

Performed under reducing conditions.

Predicted band size: 56 kDa
Observed band size: 56 kDa

False colour image of Western blot: Anti-OXCT1/SCOT antibody staining at 0.04 µg/ml, shown in green; Mouse anti-GAPDH antibody [6C5] (**ab8245**) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab224250 was shown to bind specifically to OXCT1/SCOT. A band was observed at 56 kDa in wild-type HeLa cell lysates with no signal observed at this size in OXCT1 knockout cell line **ab265358** (knockout cell lysate **ab258557**). To generate this image, wild-type and OXCT1 knockout HeLa cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) at 1/20000 dilution.



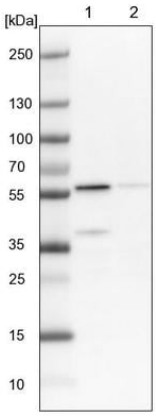
Western blot - Anti-OXCT1/SCOT antibody (ab224250)

Lane 1 : ab224250 at 0.4 µg/ml
Lane 2 : Anti-OXCT1/SCOT antibody (ab224250) at 0.4 µg/ml

Lane 1 : HeLa (Human epithelial cell line from cervix adenocarcinoma) lysate
Lane 2 : A549 (Human lung carcinoma cell line) lysate

Predicted band size: 56 kDa

Loading control: Anti-COX4I1.

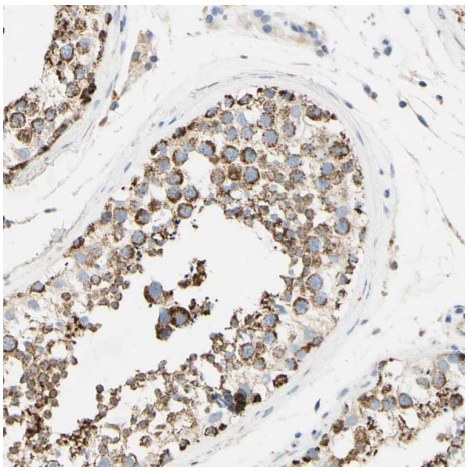


Western blot - Anti-OXCT1/SCOT antibody (ab224250)

All lanes : Anti-OXCT1/SCOT antibody (ab224250) at 1/100 dilution

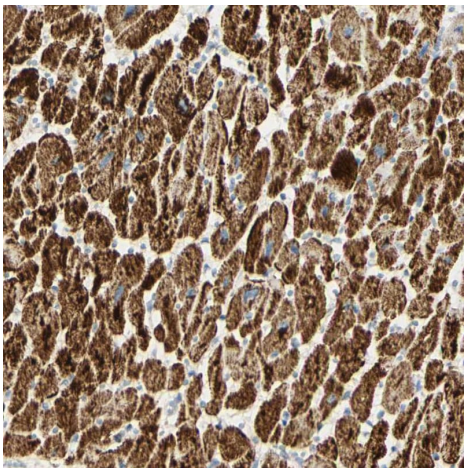
Lane 1 : NIH/3T3 (mouse embyro fibroblast cell line) cell lysate
Lane 2 : NBT-II (rat Wistar bladder tumor cell line) cell lysate

Predicted band size: 56 kDa



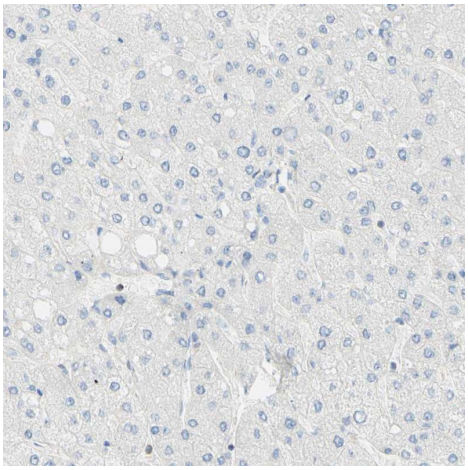
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-OXCT1/SCOT antibody (ab224250)

Paraffin-embedded human testis stained for OXCT1 using ab224250 at 1/200 dilution in immunohistochemical analysis. Shows strong cytoplasmic positivity in cells in seminiferous ducts.



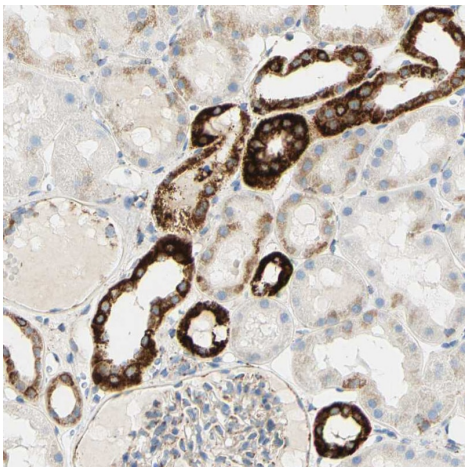
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-OXCT1/SCOT antibody (ab224250)

Paraffin-embedded human heart stained for OXCT1 using ab224250 at 1/200 dilution in immunohistochemical analysis. Shows strong cytoplasmic positivity in cardiomyocytes.



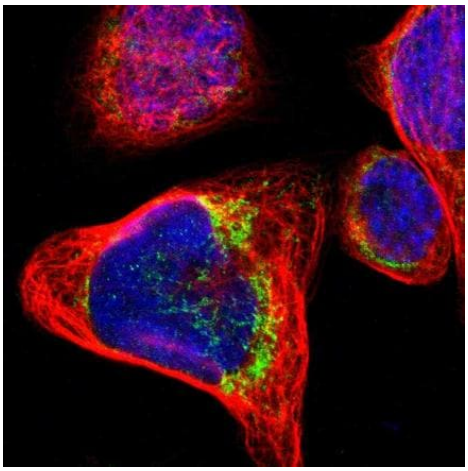
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-OXCT1/SCOT antibody (ab224250)

Paraffin-embedded human liver stained for OXCT1
using ab224250 at 1/200 dilution in immunohistochemical analysis.
Shows no positivity in hepatocytes as expected.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-OXCT1/SCOT antibody (ab224250)

Paraffin-embedded human kidney stained for OXCT1
using ab224250 at 1/200 dilution in immunohistochemical analysis.
Shows strong cytoplasmic positivity in cells in tubules.



Immunocytochemistry/ Immunofluorescence - Anti-OXCT1/SCOT antibody (ab224250)

PFA-fixed, Triton X-100 permeabilized A431 (human epidermoid carcinoma cell line) cells stained for OXCT1/SCOT (green) using ab224250 (4 µg/ml) in ICC/IF.

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