

Rabbit OXCT1/SCOT Polyclonal Antibody | anti-OXCT1 antibody

Anti-OXCT1/SCOT Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125787	Rabbit	Human, Mouse, Rat, Monkey	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

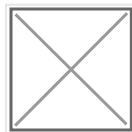
PRODUCT SYNONYMS

OXCT1/SCOT; Polyclonal Antibody; Anti-OXCT1/SCOT Antibody; OXCT1; OXCT; SCOT; Succinyl-CoA:3-ketoacid coenzyme A transferase 1; mitochondrial; EC 2. 8. 3. 5; 3-oxoacid CoA-transferase 1; Somatic-type succinyl-CoA:3-oxoacid CoA-transferase; SCOT-s; anti-OXCT1 antibody

PRODUCT SPECIFICATIONS

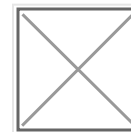
Host	Rabbit
Reactivity	Human, Mouse, Rat, Monkey
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for OXCT1/SCOT detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-OXCT1 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E Coli-derived human OXCT1/SCOT recombinant protein (Position: S35-A309).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of U87 cells using anti-OXCT1/SCOT antibody (AAA125787). Overlay histogram showing U87 cells stained with AAA125787 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-OXCT1/SCOT Antibody (AAA125787, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 2. IF analysis of OXCT1/SCOT using anti-OXCT1/SCOT antibody (AAA125787). OXCT1/SCOT was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5µg/mL rabbit anti-OXCT1/SCOT Antibody (AAA125787) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



WB (Western Blot)

Figure 1. Western blot analysis of OXCT1/SCOT using anti-OXCT1/SCOT antibody (AAA125787). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human HELA whole cell lysates Lane 2: human HEK293 whole cell lysates Lane 3: monkey heart tissue lysates Lane 4: human placenta tissue lysates Lane 5: rat heart tissue lysates Lane 6: rat brain tissue lysates Lane 7: rat kidney tissue lysates Lane 8: mouse heart tissue lysates Lane 9: mouse kidney tissue lysates Lane 10: mouse ANA-1 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-OXCT1/SCOT antigen affinity purified polyclonal antibody (Catalog # AAA125787) at 0.25 µg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for OXCT1/SCOT at approximately 56KD. The expected band size for OXCT1/SCOT is at 56KD.

ADDITIONAL INFORMATION

Related Product Information for anti-OXCT1 antibody	3-oxoacid CoA-transferase 1 (OXCT1) is an enzyme that in humans is encoded by the OXCT1 gene. It is also known as succinyl-CoA:3-oxaloacid CoA transferase (SCOT). This gene encodes a member of the 3-oxoacid CoA-transferase gene family. The encoded protein is a homodimeric mitochondrial matrix enzyme that plays a central role in extrahepatic ketone body catabolism by catalyzing the reversible transfer of coenzyme A from succinyl-CoA to acetoacetate. Mutations in this gene are associated with succinyl CoA:3-oxoacid CoA transferase deficiency.
References	<ol style="list-style-type: none">1. Fukao, T., Mitchell, G. A., Song, X. -Q., Nakamura, H., Kassovska-Bratinova, S., Orii, K. E., Wraith, J. E., Besley, G., Wanders, R. J. A., Niezen-Koning, K. E., Berry, G. T., Palmieri, M., Kondo, N. Succinyl-CoA:3-ketoacid CoA transferase (SCOT): cloning of the human SCOT gene, tertiary structural modeling of the human SCOT monomer, and characterization of three pathogenic mutations. Genomics 68: 144-151, 2000.2. Hori, T., Fukao, T., Murase, K., Sakaguchi, N., Harding, C. O., Kondo, N. Molecular basis of two-exon skipping (exons 12 and 13) by c. 1248+5g-a in OXCT1 gene: study on intermediates of OXCT1 transcripts in fibroblasts. Hum. Mutat. 34: 473-480, 2013.3. Kassovska-Bratinova, S., Fukao, T., Song, X. -Q., Duncan, A. M. V., Chen, H. S., Robert, M. -F., Perez-Cerda, C., Ugarte, M., Chartrand, C., Vobecky, S., Kondo, N., Mitchell, G. A. Succinyl CoA:3-oxoacid CoA transferase (SCOT): human cDNA cloning, human chromosomal mapping to 5p13, and mutation detection in a SCOT-deficient patient. Am. J. Hum. Genet. 59: 519-528, 1996.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4557817
NCBI GeneID	5019
NCBI Accession #	NP_000427.1
NCBI GenBank Nucleotide #	NM_000436.3
UniProt Accession #	P55809; B2R5V2; B7Z528
Molecular Weight	13,358 Da
NCBI Official Full Name	succinyl-CoA:3-ketoacid coenzyme A transferase 1, mitochondrial
NCBI Official Synonym Full Names	3-oxoacid CoA-transferase 1
NCBI Official Symbol	OXCT1
NCBI Official Synonym Symbols	OXCT; SCOT
NCBI Protein Information	succinyl-CoA:3-ketoacid coenzyme A transferase 1, mitochondrial
UniProt Protein Name	Succinyl-CoA:3-ketoacid coenzyme A transferase 1, mitochondrial

UniProt Gene Name	OXCT1
UniProt Synonym Gene Names	OXCT; SCOT; SCOT-s

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/oxct1-scot-antibody-direct-elisa-flow-cytometry-immunofluorescence-immunocytochemistry-western-blot-elisa/125787>