10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

OXCT1 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21464c

Specification

OXCT1 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	P55809
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**56158**

OXCT1 Antibody (Center) - Additional Information

Gene ID 5019

Other Names
Succinyl-CoA:3-ketoacid coenzyme A transferase 1, mitochondrial, 3-oxoacid CoA-transferase 1, Somatic-type succinyl-CoA:3-oxoacid CoA-transferase, SCOT-s, OXCT1, OXCT, SCOT

Target/Specificity
This OXCT1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 272-306 amino acids from the Central region of human OXCT1.

Dilution
WB~~1:2000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
OXCT1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

OXCT1 Antibody (Center) - Protein Information

Name OXCT1

Synonyms OXCT, SCOT

Function Key enzyme for ketone body catabolism. Catalyzes the first, rate-limiting step of ketone

body utilization in extrahepatic tissues, by transferring coenzyme A (CoA) from a donor thiolester species (succinyl-CoA) to an acceptor carboxylate (acetoacetate), and produces acetoacetyl-CoA. Acetoacetyl-CoA is further metabolized by acetoacetyl- CoA thiolase into two acetyl-CoA molecules which enter the citric acid cycle for energy production (PubMed:10964512). Forms a dimeric enzyme where both of the subunits are able to form enzyme-CoA thiolester intermediates, but only one subunit is competent to transfer the CoA moiety to the acceptor carboxylate (3-oxo acid) and produce a new acyl- CoA. Formation of the enzyme-CoA intermediate proceeds via an unstable anhydride species formed between the carboxylate groups of the enzyme and substrate (By similarity).

Cellular Location
Mitochondrion {ECO:0000250|UniProtKB:B2GV06}.

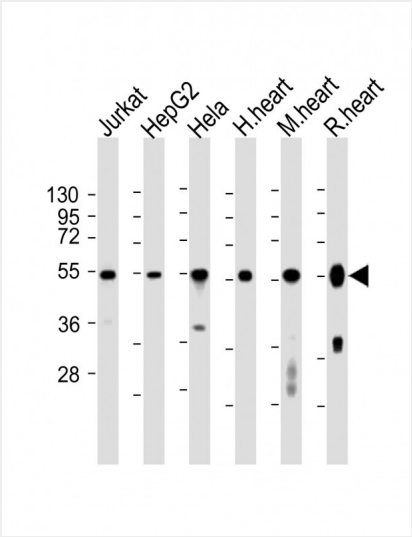
Tissue Location
Abundant in heart, followed in order by brain, kidney, skeletal muscle, and lung, whereas in liver it is undetectable Expressed (at protein level) in all tissues (except in liver), most abundant in myocardium, then brain, kidney, adrenal glands, skeletal muscle and lung; also detectable in leukocytes and fibroblasts

OXCT1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

OXCT1 Antibody (Center) - Images



All lanes : Anti-OXCT1 Antibody (Center) at 1:2000 dilution Lane 1: Jurkat whole cell lysates Lane 2: HepG2 whole cell lysates Lane 3: Hela whole cell lysates Lane 4: human heart lysates Lane 5: mouse heart lysates Lane 6: rat heart lysates Lysates/proteins at 20 µg per lane. Secondary Goat

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 56 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

OXCT1 Antibody (Center) - Background

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.

OXCT1 Antibody (Center) - References

Kassovska-Bratinova S.,et al.Am. J. Hum. Genet. 59:519-528(1996).
Fukao T.,et al.Genomics 68:144-151(2000).
Schmutz J.,et al.Nature 431:268-274(2004).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Reymond M.A.,et al.Submitted (FEB-1997) to UniProtKB.

OXCT1 Antibody (Center) - Citations

- Tandem mass tags labeled quantitative proteomics to study the effect of tobacco smoke exposure on the rat lung.