

OXCT1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP9539c**Specification****OXCT1 Antibody (Center) Blocking Peptide - Product Information****Primary Accession** [P55809](#)**OXCT1 Antibody (Center) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

OXCT1 Antibody (Center) Blocking Peptide - 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 thioester 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 thioester 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) Blocking Peptide - Protocols****

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

- [Blocking Peptides](#)

****OXCT1 Antibody (Center) Blocking Peptide - Images********OXCT1 Antibody (Center) Blocking Peptide - Background****

OXCT1 is a member of the 3-oxoacid CoA-transferase gene family. This 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.

****OXCT1 Antibody (Center) Blocking Peptide - References****

??artins-de-Souza, D., et al. J Psychiatr Res (2010) In press :??acDonald, M.J., et al. Diabetologia 52(6):1087-1091(2009)?rii, K.E., et al. Tohoku J. Exp. Med. 215(3):227-236(2008)?ukao, T., et al. Mol. Genet. Metab. 92(3):216-221(2007)?ukao, T., et al. Mol. Genet. Metab. 89(3):280-282(2006)