

SUCLA2 Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP5328c**Specification**

SUCLA2 Antibody (Center) Blocking peptide - Product Information

Primary Accession [O9P2R7](#)
Other Accession [NP_003841.1](#)

SUCLA2 Antibody (Center) Blocking peptide - Additional Information

Gene ID 8803

Other Names

Succinyl-CoA ligase [ADP-forming] subunit beta, mitochondrial, ATP-specific succinyl-CoA synthetase subunit beta, Renal carcinoma antigen NY-REN-39, Succinyl-CoA synthetase beta-A chain, SCS-betaA, SUCLA2

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.

SUCLA2 Antibody (Center) Blocking peptide - Protein Information

Name SUCLA2 {ECO:0000255|HAMAP-Rule:MF_03220}

Function

ATP-specific succinyl-CoA synthetase functions in the citric acid cycle (TCA), coupling the hydrolysis of succinyl-CoA to the synthesis of ATP and thus represents the only step of substrate-level phosphorylation in the TCA (PubMed:15877282). The beta subunit provides nucleotide specificity of the enzyme and binds the substrate succinate, while the binding sites for coenzyme A and phosphate are found in the alpha subunit (By similarity).

Cellular Location

Mitochondrion {ECO:0000255|HAMAP-Rule:MF_03220, ECO:0000269|PubMed:15877282, ECO:0000269|PubMed:17287286, ECO:0000269|PubMed:25944712}

Tissue Location

Widely expressed. Not expressed in liver and lung.

SUCLA2 Antibody (Center) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

SUCLA2 Antibody (Center) Blocking peptide - Images

SUCLA2 Antibody (Center) Blocking peptide - Background

Succinyl-CoA synthetase (SCS) is a mitochondrial matrix enzyme that acts as a heterodimer, being composed of an invariant alpha subunit and a substrate-specific beta subunit. The protein encoded by this gene is an ATP-specific SCS beta subunit that dimerizes with the SCS alpha subunit to form SCS-A, an essential component of the tricarboxylic acid cycle. SCS-A hydrolyzes ATP to convert succinate to succinyl-CoA. Defects in this gene are a cause of myopathic mitochondrial DNA depletion syndrome. A pseudogene of this gene has been found on chromosome 6.

SUCLA2 Antibody (Center) Blocking peptide - References

Ostergaard, E., et al. Eur. J. Pediatr. 169(2):201-205(2010)Elpeleg, O., et al. Am. J. Hum. Genet. 76(6):1081-1086(2005)Rush, J., et al. Nat. Biotechnol. 23(1):94-101(2005)