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SDHAF1 Blocking Peptide (Center)

Synthetic peptide
Catalog # BP5392C

Specification

SDHAF1 Blocking Peptide (Center) - Product Information

Primary Accession	A6NFY7
Other Accession	B0K036, Q3U276, A8PU71, NP_001036096.1

SDHAF1 Blocking Peptide (Center) - Additional Information

Gene ID 644096

Other Names
Succinate dehydrogenase assembly factor 1, mitochondrial, SDH assembly factor 1, SDHAF1, LYR motif-containing protein 8, SDHF1

Target/Specificity
The synthetic peptide sequence is selected from aa 49-62 of HUMAN SDHF1

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.

SDHAF1 Blocking Peptide (Center) - Protein Information

Name SDHAF1 {ECO:0000303|PubMed:19465911, ECO:0000312|HGNC:HGNC:33867}

Function
Plays an essential role in the assembly of succinate dehydrogenase (SDH), an enzyme complex (also referred to as respiratory complex II) that is a component of both the tricarboxylic acid (TCA) cycle and the mitochondrial electron transport chain, and which couples the oxidation of succinate to fumarate with the reduction of ubiquinone (coenzyme Q) to ubiquinol (PubMed:19465911, PubMed:24954417). Promotes maturation of the iron-sulfur protein subunit SDHB of the SDH catalytic dimer, protecting it from the deleterious effects of oxidants (PubMed:24954417). May act together with SDHAF3 (PubMed:24954417). Contributes to iron-sulfur cluster incorporation into SDHB by binding to SDHB and recruiting the iron-sulfur transfer complex formed by HSC20, HSPA9 and ISCU through direct binding to HSC20 (PubMed:26749241).

Cellular Location
Mitochondrion matrix

Tissue Location
Ubiquitously expressed.

SDHAF1 Blocking Peptide (Center) - Protocols

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

- Blocking Peptides

SDHAF1 Blocking Peptide (Center) - Images

SDHAF1 Blocking Peptide (Center) - Background

The succinate dehydrogenase (SDH) complex (or complex II) of the mitochondrial respiratory chain is composed of 4 individual subunits. The protein encoded by this gene resides in the mitochondria, and is essential for SDH assembly, but does not physically associate with the complex in vivo. Mutations in this gene are associated with SDH-defective infantile leukoencephalopathy (mitochondrial complex II deficiency).

SDHAF1 Blocking Peptide (Center) - References

Ghezzi, D., et al. Nat. Genet. (2009) In press :
Hoffmann, T.W., et al. Transplant. Proc. 41(2):654-656(2009)