

## SDHAF1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5392C

### Specification

# SDHAF1 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region IHC-P, WB,E <u>A6NFY7</u> <u>B0K036</u>, <u>03U276</u>, <u>A8PU71</u>, <u>NP\_001036096.1</u> Human Bovine, Mouse, Rat Rabbit Polyclonal Rabbit IgG 12806 34-62

### SDHAF1 Antibody (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

This SDHAF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 34-62 amino acids from the Central region of human SDHAF1.

**Dilution** IHC-P~~1:50~100 WB~~1:1000 E~~Use at an assay dependent concentration.

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

SDHAF1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# SDHAF1 Antibody (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:<u>19465911</u>, PubMed:<u>24954417</u>). Promotes maturation of the iron-sulfur protein subunit SDHB of the SDH catalytic dimer, protecting it from the deleterious effects of oxidants (PubMed:<u>24954417</u>). May act together with SDHAF3 (PubMed:<u>24954417</u>). 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:<u>26749241</u>).

**Cellular Location** Mitochondrion matrix

**Tissue Location** Ubiquitously expressed.

## SDHAF1 Antibody (Center) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### SDHAF1 Antibody (Center) - Images



SDHAF1 Antibody (Center)(Cat. #AP5392c) western blot analysis in ZR-75-1 cell line lysates (35ug/lane).This demonstrates the SDHAF1 antibody detected the SDHAF1 protein (arrow).





SDHAF1 Antibody (Center) (Cat. #AP5392c) immunohistochemistry analysis in formalin fixed and paraffin embedded human prostate carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the SDHAF1 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

# SDHAF1 Antibody (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 Antibody (Center) - References

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