

**Goat Anti-SDHAF1 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF2195a****Specification**

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**Goat Anti-SDHAF1 Antibody - Product Information**

Application	WB, E
Primary Accession	<a href="#">A6NFY7</a>
Other Accession	<a href="#">NP_001036096</a> , <a href="#">644096</a> , <a href="#">68332 (mouse)</a>
Reactivity	Human
Predicted	Mouse, Dog
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	12806

**Goat Anti-SDHAF1 Antibody - Additional Information****Gene ID** 644096**Other Names**

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

**Dilution**

WB~~1:1000

E~~N/A

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-SDHAF1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-SDHAF1 Antibody - 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:<a href="http://www.uniprot.org/citations/19465911" target="\_blank">19465911</a>, PubMed:<a href="http://www.uniprot.org/citations/24954417" target="\_blank">24954417</a>). Promotes maturation of the iron-sulfur protein subunit SDHB of the SDH catalytic dimer, protecting it from the deleterious effects of oxidants (PubMed:<a href="http://www.uniprot.org/citations/24954417" target="\_blank">24954417</a>). May act together with SDHAF3 (PubMed:<a href="http://www.uniprot.org/citations/24954417" target="\_blank">24954417</a>). 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:<a href="http://www.uniprot.org/citations/26749241" target="\_blank">26749241</a>).

**Cellular Location**

Mitochondrion matrix

**Tissue Location**

Ubiquitously expressed.

**Goat Anti-SDHAF1 Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Goat Anti-SDHAF1 Antibody - Images**

AF2195a (0.3 µg/ml) staining of Human Cerebellum lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

**Goat Anti-SDHAF1 Antibody - 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).

#### **Goat Anti-SDHAF1 Antibody - References**

SDHAF1, encoding a LYR complex-II specific assembly factor, is mutated in SDH-defective infantile leukoencephalopathy. Ghezzi D, et al. Nat Genet, 2009 Jun. PMID 19465911.  
Impact of a polymorphism in the IL-12p40 gene on the outcome of kidney transplantation. Hoffmann TW, et al. Transplant Proc, 2009 Mar. PMID 19328947.  
Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. Strausberg RL, et al. Proc Natl Acad Sci U S A, 2002 Dec 24. PMID 12477932.  
Normalization and subtraction: two approaches to facilitate gene discovery. Bonaldo MF, et al. Genome Res, 1996 Sep. PMID 8889548.