

**Anti-SDHA Antibody**  
Catalog # ABO11027**Specification**

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**Anti-SDHA Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">P31040</a>
Host	<b>Rabbit</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Polyclonal</b>
Format	<b>Lyophilized</b>

**Description**

Rabbit IgG polyclonal antibody for Succinate dehydrogenase[ubiquinone] flavoprotein subunit, mitochondrial(SDHA) detection. Tested with WB in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-SDHA Antibody - Additional Information**

**Gene ID** 6389

**Other Names**

Succinate dehydrogenase [ubiquinone] flavoprotein subunit, mitochondrial, 1.3.5.1, Flavoprotein subunit of complex II, Fp, SDHA, SDH2, SDHF

**Calculated MW**

72692 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse<br>

**Subcellular Localization**

Mitochondrion inner membrane; Peripheral membrane protein; Matrix side.

**Protein Name**

Succinate dehydrogenase [ubiquinone] flavoprotein subunit, mitochondrial

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human SDHA(113-128aa NMEEDNWRWHFYDTVK), identical to the related rat and mouse sequences.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

Storage

**At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.**

#### Sequence Similarities

Belongs to the FAD-dependent oxidoreductase 2 family. FRD/SDH subfamily.

### Anti-SDHA Antibody - Protein Information

**Name** SDHA

**Synonyms** SDH2, SDHF

#### Function

Flavoprotein (FP) subunit of succinate dehydrogenase (SDH) that is involved in complex II of the mitochondrial electron transport chain and is responsible for transferring electrons from succinate to ubiquinone (coenzyme Q) (Probable) (PubMed:<a href="http://www.uniprot.org/citations/24781757" target="\_blank">24781757</a>). SDH also oxidizes malate to the non-canonical enol form of oxaloacetate, enol- oxaloacetate (By similarity). Enol-oxaloacetate, which is a potent inhibitor of the succinate dehydrogenase activity, is further isomerized into keto-oxaloacetate (By similarity). Can act as a tumor suppressor (PubMed:<a href="http://www.uniprot.org/citations/20484225" target="\_blank">20484225</a>).

#### Cellular Location

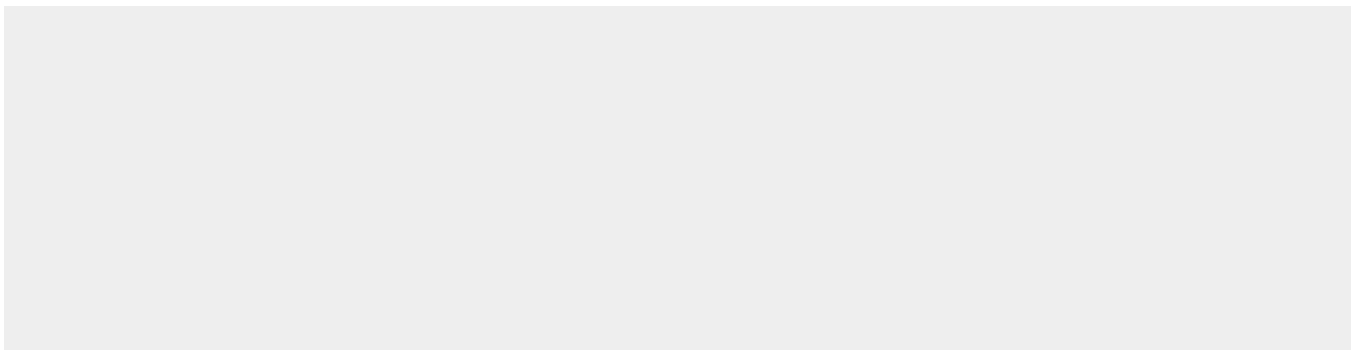
Mitochondrion inner membrane; Peripheral membrane protein; Matrix side

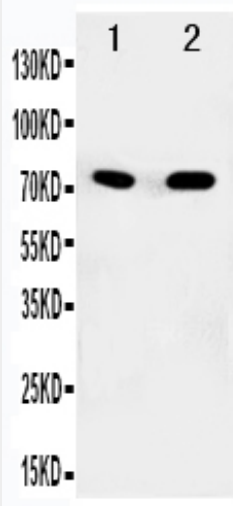
### Anti-SDHA Antibody - Protocols

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](#)

### Anti-SDHA Antibody - Images





Anti-SDHA antibody, ABO11027, Western blotting Lane 1: Rat Heart Tissue Lysate Lane 2: COLO320 Cell Lysate

### **Anti-SDHA Antibody - Background**

SDHA (Succinate dehydrogenase complex, subunit a, flavoprotein), also called SDH1, HOMOLOG OF, is a protein that in humans is encoded by the SDHA gene. The SDHA gene is mapped on 5p15.33. The SDHA gene is highly polymorphic. The gene that codes for the SDHA protein is nuclear, even though the protein is located in the inner membrane of the mitochondria. Heterozygous carriers of an SDHA mutation do not develop paragangliomas as has been seen for mutations in the other subunits. In vitro functional expression studies in the yeast homolog showed that the mutation resulted in a loss of SDH activity and rendered the mutant SDHA protein more susceptible to proteolysis. The findings indicated that SDHA, like other SDH subunits, can act as a tumor suppressor gene.