

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

Anti-SDHA Antibody - Product Information

Application	WB
Primary Accession	P31040
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

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

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 Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

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 reconstitution, 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) (PubMed: [10746566](http://www.uniprot.org/citations/10746566), PubMed: [24781757](http://www.uniprot.org/citations/24781757)). 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: [20484225](http://www.uniprot.org/citations/20484225)).

Cellular Location

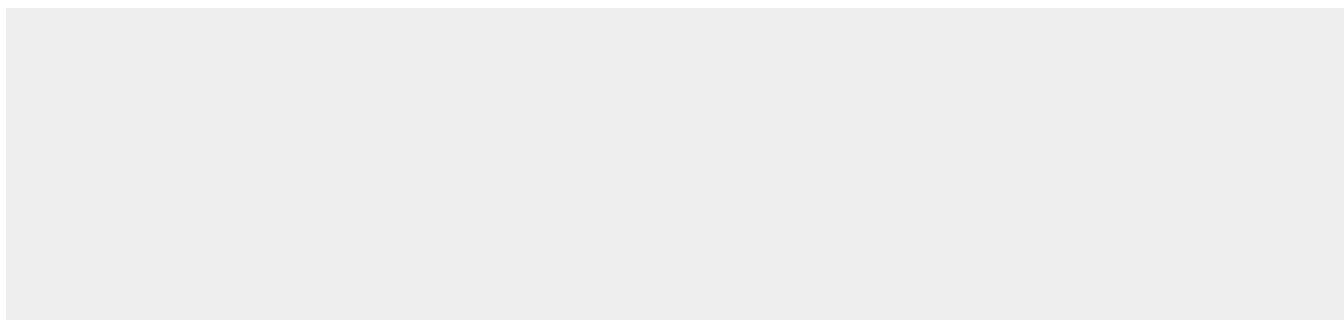
Mitochondrion inner membrane; Peripheral membrane protein; Matrix side

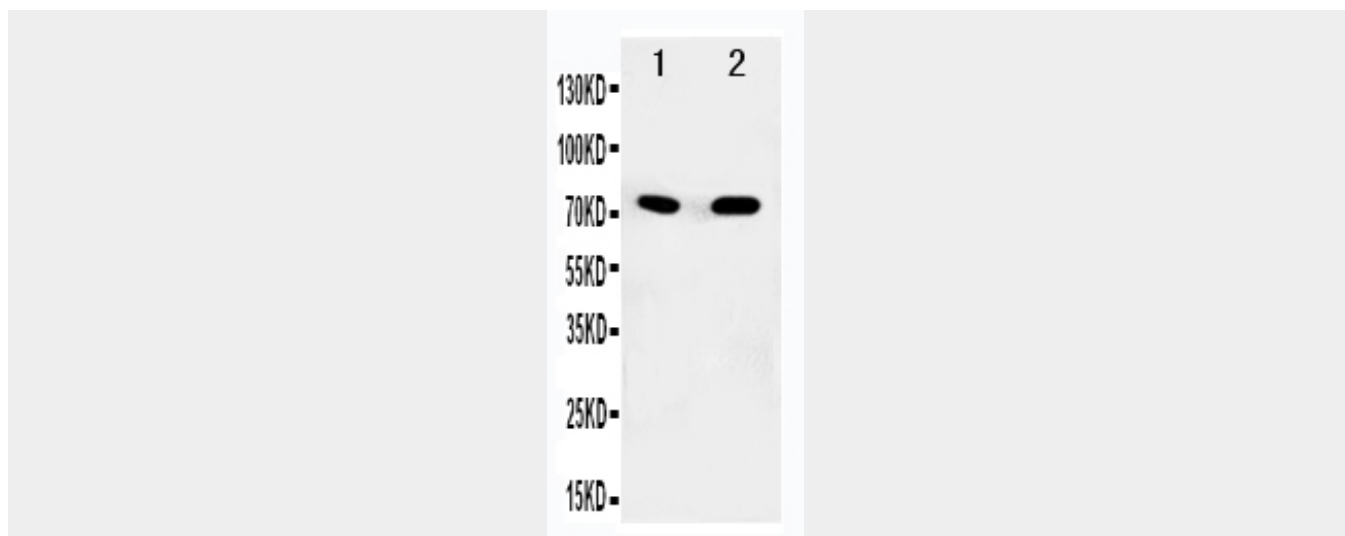
Anti-SDHA Antibody - Protocols

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.