

Anti-SDHB Antibody
Catalog # ABO11028**Specification****Anti-SDHB Antibody - Product Information**

Application	IHC, WB
Primary Accession	P21912
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Succinate dehydrogenase[ubiquinone] iron-sulfur subunit, mitochondrial(SDHB) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

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

Anti-SDHB Antibody - Additional Information

Gene ID 6390

Other Names

Succinate dehydrogenase [ubiquinone] iron-sulfur subunit, mitochondrial, 1.3.5.1, Iron-sulfur subunit of complex II, Ip, SDHB, SDH, SDH1

Calculated MW

31630 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat
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] iron-sulfur 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 SDHB(42-59 FAIYRWDPDKAGDKPHMQ), different from the related rat sequence by one amino acid and mouse sequence by two amino acids.

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 succinate dehydrogenase/fumarate reductase iron-sulfur protein family.

Anti-SDHB Antibody - Protein Information**Name** SDHB**Synonyms** SDH, SDH1**Function**

Iron-sulfur protein (IP) subunit of the succinate dehydrogenase complex (mitochondrial respiratory chain complex II), responsible for transferring electrons from succinate to ubiquinone (coenzyme Q) (PubMed: 26925370, PubMed: 27604842). 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).

Cellular Location

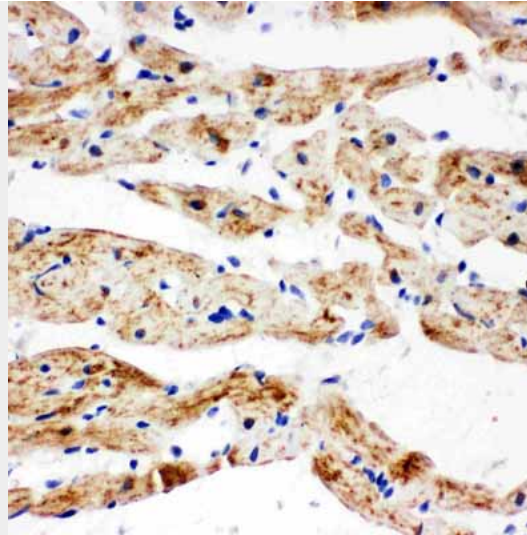
Mitochondrion inner membrane; Peripheral membrane protein; Matrix side

Anti-SDHB Antibody - Protocols

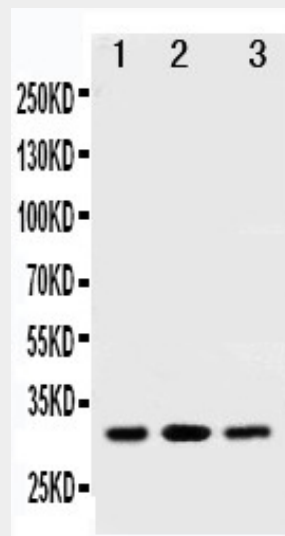
Provided below are standard protocols that you may find useful for product applications.

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

Anti-SDHB Antibody - Images



Anti-SDHB antibody, ABO11028, IHC(P)IHC(P): Rat Cardiac Muscle Tissue



Anti-SDHB antibody, ABO11028, Western blotting All lanes: Anti SDHB (ABO11028) at 0.5ug/ml
 Lane 1: Rat Testis Tissue Lysate at 50ug
 Lane 2: Rat Cardiac Muscle Tissue Lysate at 50ug
 Lane 3: Jurkat Whole Cell Lysate at 40ug
 Predicted bind size: 32KD
 Observed bind size: 32KD

Anti-SDHB Antibody - Background

SDHB(Succinate Dehydrogenase Complex, Subunit B, iron sulfur protein), also known as iron-sulfur subunit of complex II(lp) or SDH2, HOMOLOG OF, is a protein that in humans is encoded by the SDHB gene. SDHB is one of four protein subunits forming succinate dehydrogenase, the other three being SDHA, SDHC and SDHD. The SDHB subunit is connected to the SDHA subunit on the hydrophilic, catalytic end of the SDH complex. The SDHB gene is mapped on 1p36.13. The entire SDHB transcript is encoded by 8 exons within approximately 40 kb by Au et al(1995). Pollard et al.(2005) stated that the nuclear-encoded Krebs cycle enzymes fumarate hydratase and succinate dehydrogenases like SDHB act as tumor suppressors, and germline mutations in these genes predispose individuals to leiomyomas and renal cancer and to paragangliomas, respectively. In affected members of families with paragangliomas-4, mutations were identified in the SDHB gene.