

Anti-SDHB Antibody

Catalog # ABO11028

### Specification

## Anti-SDHB Antibody - Product Information

Application Primary Accession Host Reactivity Clonality Format Description IHC, WB <u>P21912</u> Rabbit Human, Mouse, Rat Polyclonal Lyophilized

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<br>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] 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).

**Cellular Location** 

Mitochondrion inner membrane {ECO:0000250|UniProtKB:Q9YHT2}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q9YHT2}; Matrix side {ECO:0000250|UniProtKB:Q9YHT2}

#### Anti-SDHB Antibody - Protocols

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

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

Anti-SDHB Antibody - Images





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



Anti-SDHB antibody, ABO11028, Western blottingAll lanes: Anti SDHB (ABO11028) at 0.5ug/mlLane 1: Rat Testis Tissue Lysate at 50ugLane 2: Rat Cardiac Muscle Tissue Lysate at 50ugLane 3: Jurkat Whole Cell Lysate at 40ugPredicted bind size: 32KDObserved 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(Ip) 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.