

Anti-SDHA Picoband Antibody
Catalog # ABO12123**Specification****Anti-SDHA Picoband 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 Picoband 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, Mouse, Rat

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 Na₃.

Immunogen

E.coli-derived human SDHA recombinant protein (Position: S44-L380). Human SDHA shares 98.2% and 97.6% amino acid (aa) sequence identity with mouse and rat SDHA, respectively.

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 Picoband 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

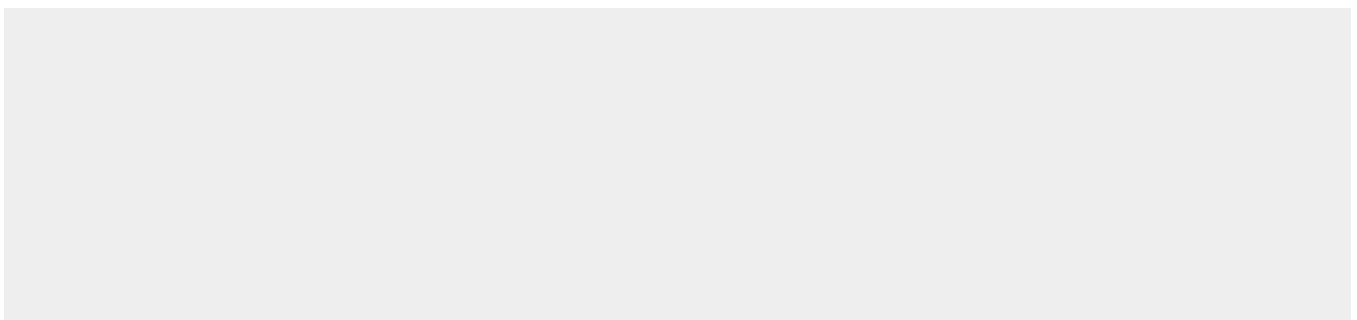
Mitochondrion inner membrane; Peripheral membrane protein; Matrix side

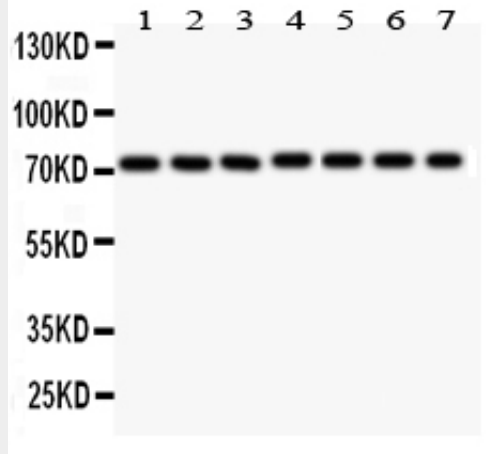
Anti-SDHA Picoband Antibody - Protocols

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 Picoband Antibody - Images





Anti- SDHA Picoband antibody, ABO12123, Western blotting All lanes: Anti SDHA (ABO12123) at 0.5ug/ml Lane 1: Rat Liver Tissue Lysate at 50ug Lane 2: Mouse Liver Tissue Lysate at 50ug Lane 3: Rat Brain Tissue Lysate at 50ug Lane 4: Mouse Brain Tissue Lysate at 50ug Lane 5: SMMC Whole Cell Lysate at 40ug Lane 6: Human Placenta Tissue Lysate at 50ug Lane 7: SW620 Whole Cell Lysate at 40ug Predicted bind size: 73KD Observed bind size: 73KD

Anti-SDHA Picoband Antibody - Background

Complex II of the mitochondrial respiratory chain, also known as succinate dehydrogenase or succinate:ubiquinone oxidoreductase, consists of 4 nuclear-encoded polypeptides, these are the flavoprotein subunit (SDHA), the iron sulfur protein subunit (SDHB), and the integral membrane protein subunits SDHC and SDHD. SDHA is an acronym for succinate dehydrogenase complex subunit A. The succinate dehydrogenase (SDH) protein complex catalyzes the oxidation of succinate (succinate + ubiquinone => fumarate + ubiquinol). The SDHA subunit is connected to the SDHB subunit on the hydrophilic, catalytic end of the complex, and weighs 72.7 kDA. Mutations in the SDHA subunit have a distinct pathology from mutations in the SDHB/SDHC/SDHD subunits; it is the only subunit to never have shown tumor suppressor behaviour. Heterozygous carriers of an SDHA mutation do not develop paragangliomas as has been seen for mutations in the other subunits. This appears to be due to the expression of two similar SDHA genes (Types I and II) in the paraganglia system.