

Anti-SDHA Picoband Antibody

Catalog # ABO12123

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.

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
Application Details	Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat
Subcellular Localization	Mitochondrion inner membrane; Peripheral membrane protein; Matrix side.
Source	Eukaryota
Protein Name	Succinate dehydrogenase [ubiquinone] flavoprotein subunit, mitochondrial
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
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.

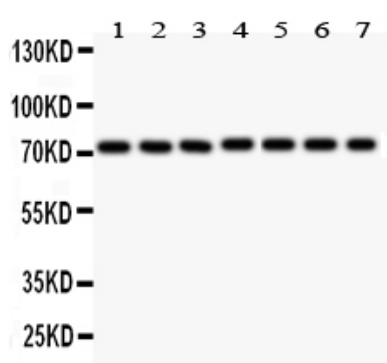
Protein Information

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 , PubMed: 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).
Cellular Location	Mitochondrion inner membrane; Peripheral membrane protein; Matrix side

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.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.