

SDHB Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19974b

Specification

SDHB Antibody (C-term) - Product Information

Application WB,E
Primary Accession P21912

Other Accession <u>Q007T0</u>, <u>Q9CQA3</u>, <u>Q3T189</u>, <u>NP_002991.2</u>

Reactivity Human

Predicted Bovine, Mouse, Pig

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 31630
Antigen Region 205-234

SDHB Antibody (C-term) - Additional Information

Gene ID 6390

Other Names

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

Target/Specificity

This SDHB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 205-234 amino acids from the C-terminal region of human SDHB.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

SDHB Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SDHB Antibody (C-term) - 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

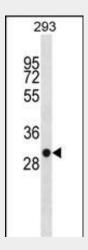
Mitochondrion inner membrane; Peripheral membrane protein; Matrix side

SDHB Antibody (C-term) - Protocols

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

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

SDHB Antibody (C-term) - Images



SDHB Antibody (C-term) (Cat. #AP19974b) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the SDHB antibody detected the SDHB protein (arrow).

SDHB Antibody (C-term) - Background

Complex II of the respiratory chain, which is specifically involved in the oxidation of succinate, carries electrons from FADH to CoQ. The complex is composed of four nuclear-encoded subunits and is localized in the mitochondrial inner membrane. The iron-sulfur subunit is highly conserved and contains three cysteine-rich clusters which may comprise the iron-sulfur centers of the enzyme. Sporadic and familial mutations in this gene result in paragangliomas and pheochromocytoma, and support a link between



mitochondrial dysfunction and tumorigenesis.

SDHB Antibody (C-term) - References

Shimada, M., et al. Hum. Genet. 128(4):433-441(2010)
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Cerecer-Gil, N.Y., et al. Clin. Cancer Res. 16(16):4148-4154(2010)
Schimke, R.N., et al. Am. J. Med. Genet. A 152A (6), 1531-1535 (2010):
Hes, F.J., et al. BMC Med. Genet. 11, 92 (2010):

SDHB Antibody (C-term) - Citations

- Stable nuclear expression of ATP8 and ATP6 genes rescues a mtDNA Complex V null mutant.
- The effect of 3-bromopyruvate on human colorectal cancer cells is dependent on glucose concentration but not hexokinase II expression.