

Datasheet for ABIN3044278
anti-SDHB antibody (N-Term)



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2 Images

Overview

Quantity:	100 µg
Target:	SDHB
Binding Specificity:	N-Term
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SDHB antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Purpose:	Anti-SDHB Antibody Picoband®
Immunogen:	A synthetic peptide corresponding to a sequence at the N-terminus of human SDHB, different from the related rat sequence by one amino acid and mouse sequence by two amino acids.
Sequence:	FAIYRWDPDK AGDKPHMQ
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins
Characteristics:	Anti-SDHB Antibody (ABIN3044278). Tested in IHC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Product Details

Purification: Immunogen affinity purified.

Target Details

Target: SDHB

Alternative Name: SDHB ([SDHB Products](#))

Background: Synonyms: Succinate dehydrogenase [ubiquinone] iron-sulfur subunit, mitochondrial, 1.3.5.1, Iron-sulfur subunit of complex II, Ip, SDHB, SDH, SDH1, Tissue Specificity: Wide tissue distribution. Undetectable in placental tissue.

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.

Sequence Similarities: Belongs to the succinate dehydrogenase/fumarate reductase iron-sulfur protein family.

Molecular Weight: 29 kDa

UniProt: [P21912](#)

Application Details

Application Notes: Western blot, 0.1-0.5 µg/mL, Human, Mouse, Rat

Immunohistochemistry (Paraffin-embedded Section), 2-5 µg/mL, Human

1. Au, H. C., Ream-Robinson, D., Bellew, L. A., Broomfield, P. L. E., Saghbini, M., Scheffler, I. E. Structural organization of the gene encoding the human iron-sulfur subunit of succinate dehydrogenase. Gene 159: 249-253, 1995. 2. Brouwers, F. M., Eisenhofer, G., Tao, J. J., Kant, J. A., Adams, K. T., Linehan, W. M., Pacak, K. High frequency of SDHB germline mutations in patients with malignant catecholamine-producing paragangliomas: implications for genetic testing. J. Clin. Endocr. Metab. 91: 4505-4509, 2006. 3. Pollard, P. J., Briere, J. J., Alam, N. A.,

Application Details

Barwell, J., Barclay, E., Wortham, N. C., Hunt, T., Mitchell, M., Olpin, S., Moat, S. J., Hargreaves, I. P., Heales, S. J., and 9 others. Accumulation of Krebs cycle intermediates and over-expression of HIF1- α in tumours which result from germline FH and SDH mutations. Hum. Molec. Genet. 14: 2231-2239, 2005.

Comment: Antibody can be supported by chemiluminescence kit ABIN921124 in WB, supported by ABIN921231 in IHC(P).

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 μ g/mL.

Concentration: 500 μ g/mL

Buffer: Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na₂HPO₄, 0.01 mg Sodium azide.

Preservative: Sodium azide

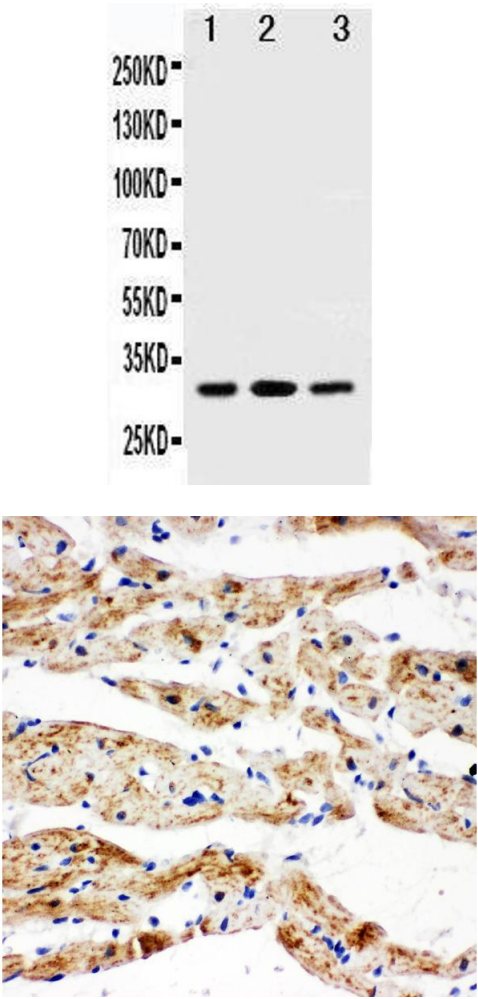
Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling Advice: Avoid repeated freezing and thawing.

Storage: 4 °C, -20 °C

Storage Comment: Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Expiry Date: 12 months



Western Blotting

Image 1. Anti-SDHB antibody, Western blotting All lanes: Anti SDHB 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

Immunohistochemistry

Image 2. Anti-SDHB antibody, IHC(P) IHC(P): Rat Cardiac Muscle Tissue