

SDHB Polyclonal Antibody

Catalog NumberPA5-21587

Product data sheet

Details		Species Reactivity	
Size	100 µL	Species reactivity	Human, Mouse
Host/Isotope	Rabbit / IgG	Published species	Not Applicable
Class	Polyclonal	Tested Applications	
Type	Antibody	Immunohistochemistry (Paraffin) (IHC (P))	1:100-1:1,000
Immunogen	Synthetic peptide corresponding to a region within amino acids 221 and 280 of SDHB (Uniprot ID#P21912)	Western Blot (WB)	1:500-1:3,000
Conjugate	Unconjugated	Immunocytochemistry (ICC/IF)	1:100-1:1,000
Form	Liquid	* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.	
Concentration	1 mg/mL		
Purification	Antigen affinity chromatography		
Storage buffer	PBS, pH 7, with 40% glycerol		
Contains	0.01% thimerosal		
Storage Conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.		

Product specific information

Recommended positive controls: THP-1, NCI-H929, Neuro2A. Predicted reactivity: Rhesus Monkey (100%). Store product as a concentrated solution. Centrifuge briefly prior to opening the vial.

Background/Target Information

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.

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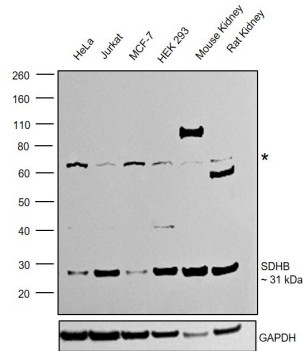
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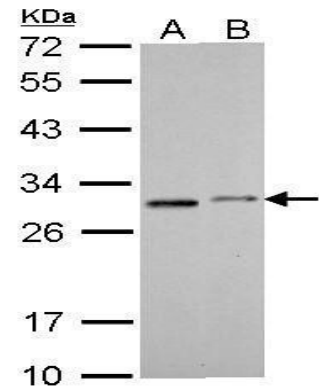
SDHB Antibody (PA5-21587) in WB

Western blot was performed using Anti-SDHB Polyclonal Antibody(Product # PA5-21587) and a ~31 kDa band corresponding to SDHB was observed across cell lines and tissues tested. Whole cell extracts (30 µg µg lysate) of HeLa (Lane 1), Jurkat (Lane 2), MCF7 (Lane 3), HEK-293 (Lane 4), Mouse Kidney (Lane 5) and Rat Kidney (Lane 6) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0322BOX). Resolved proteins were then transferred onto a Nitrocellulose membrane (Product # LC2002) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:1,000 dilution) and detected by chemiluminescence with Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A27036,1: 4,000) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005). A non specific band was observed around 65 kDa across cell lines and tissues tested.



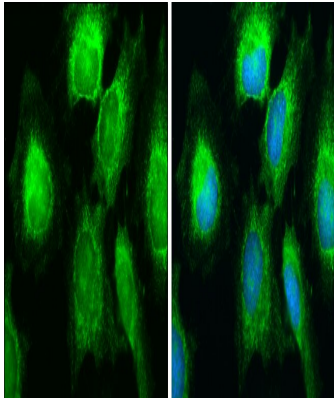
SDHB Antibody (PA5-21587) in WB

SDHB Polyclonal Antibody detects SDHB protein by western blot analysis. A. 30 µg THP-1 whole cell lysate/extract. B. 30 µg NCI-H929 whole cell lysate/extract.12% SDS-PAGE. SDHB Polyclonal Antibody (Product # PA5-21587) dilution: 1:1,000. The HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody.



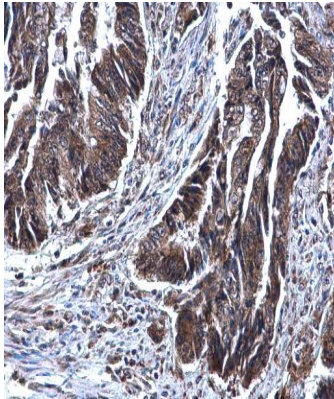
SDHB Antibody (PA5-21587) in ICC/IF

Immunocytochemistry-Immunofluorescence analysis of SDHB was performed in HeLa cells fixed in 4% paraformaldehyde at RT for 15 min. Green: SDHB Polyclonal Antibody (Product # PA5-21587) diluted at 1:500. Blue: Hoechst 33342 staining.



SDHB Antibody (PA5-21587) in IHC (P)

SDHB Polyclonal Antibody detects SDHB protein at mitochondria on human colon carcinoma by immunohistochemical analysis. Sample: Paraffin-embedded human colon carcinoma. SDHB Polyclonal Antibody (Product # PA5-21587) diluted at 1:500. Antigen Retrieval: EDTA based buffer, pH 8.0, 15 min.



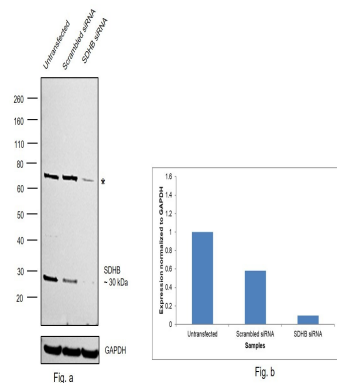
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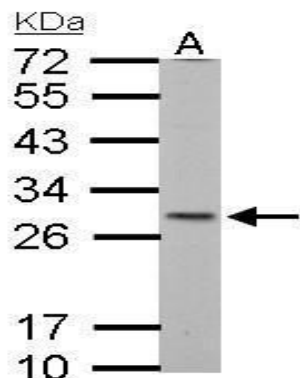
### SDHB Antibody (PA5-21587) in WB

Knockdown of SDHB was achieved by transfecting HeLa with SDHB specific siRNAs (Silencer® select Product # s532300, s12654). Western blot analysis (Fig. a) was performed using Whole cell extracts from the SDHB knockdown cells (lane 3), non-targeting scrambled siRNA transfected cells (lane 2) and untransfected cells (lane 1). The blot was probed with SDHB Polyclonal Antibody (Product # PA5-21587, 1:1000 dilution ) and Goat anti-Rabbit IgG (Heavy Chain) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A27036, 1:4000). Densitometric analysis of this western blot is shown in histogram (Fig. b). Decrease in signal upon siRNA mediated knock down confirms that antibody is specific to SDHB. A non specific band around 65 kDa was observed



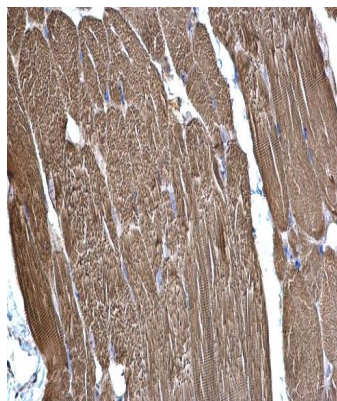
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SDHB Polyclonal Antibody detects SDHB protein by western blot analysis. A. 30 µg Neuro2A whole cell lysate/extract. 12% SDS-PAGE. SDHB Polyclonal Antibody (Product # PA5-21587) dilution: 1:1,000. The HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody.



### SDHB Antibody (PA5-21587) in IHC (P)

SDHB Polyclonal Antibody detects SDHB protein at mitochondria on mouse muscle by immunohistochemical analysis. Sample: Paraffin-embedded mouse muscle. SDHB Polyclonal Antibody (Product # PA5-21587) diluted at 1:500. Antigen Retrieval: EDTA based buffer, pH 8.0, 15 min.



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