

SDHD Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12155a

Specification

SDHD Antibody (N-term) - Product Information

Application	IF, WB, IHC-P, FC,E
Primary Accession	O14521
Other Accession	NP_002993.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	13-42

SDHD Antibody (N-term) - Additional Information

Gene ID 6392

Other Names

Succinate dehydrogenase [ubiquinone] cytochrome b small subunit, mitochondrial, CybS, CII-4, QPs3, Succinate dehydrogenase complex subunit D, Succinate-ubiquinone oxidoreductase cytochrome b small subunit, Succinate-ubiquinone reductase membrane anchor subunit, SDHD, SDH4

Target/Specificity

This SDHD antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 13-42 amino acids from the N-terminal region of human SDHD.

Dilution

IF~~1:10~50
WB~~1:1000
IHC-P~~1:10~50
FC~~1:10~50

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

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

SDHD Antibody (N-term) - Protein Information

Name SDHD

Synonyms SDH4

Function Membrane-anchoring 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:[10482792](#), PubMed:[9533030](#)). 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

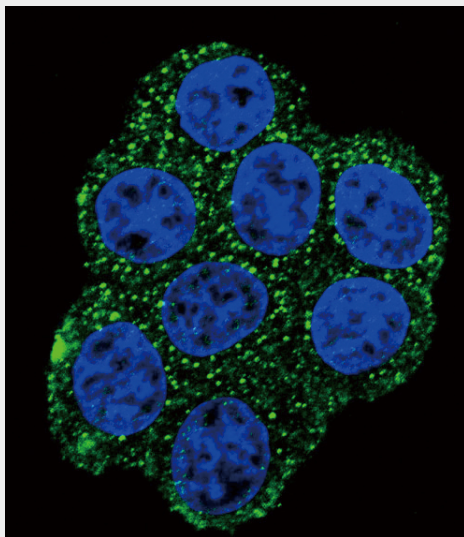
Mitochondrion inner membrane; Multi-pass membrane protein

SDHD Antibody (N-term) - Protocols

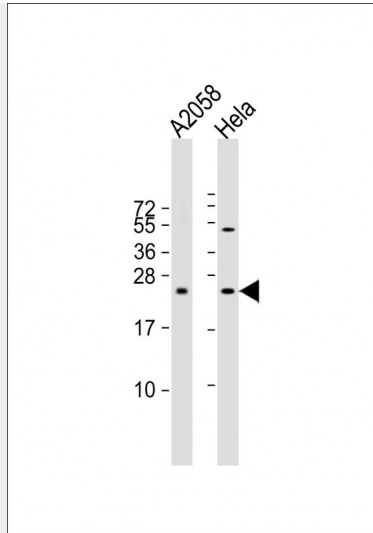
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

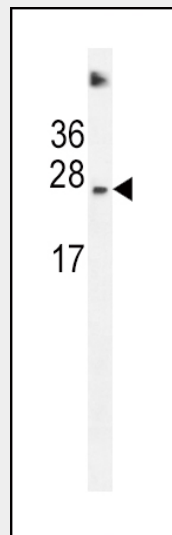
SDHD Antibody (N-term) - Images



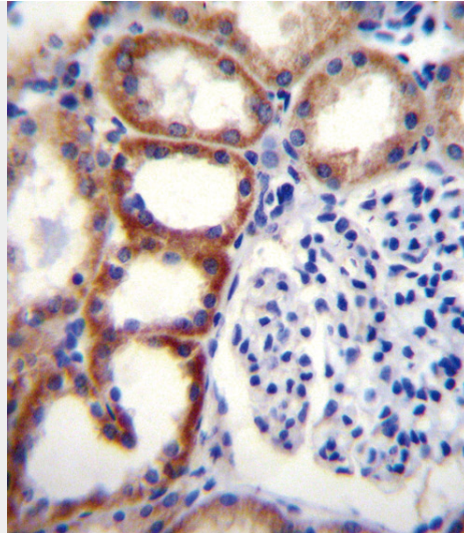
Confocal immunofluorescent analysis of SDHD Antibody (N-term)(Cat#AP12155a) with HeLa cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



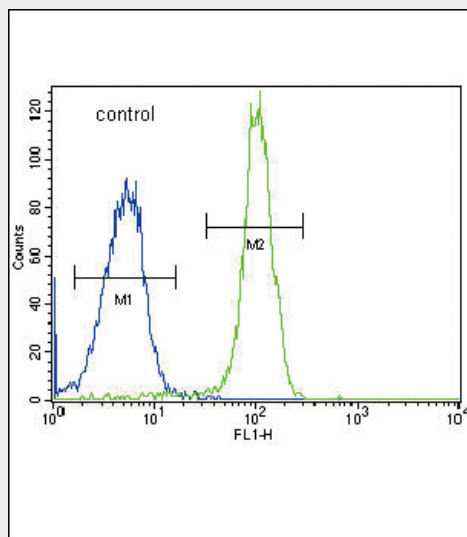
All lanes : Anti-SDHD Antibody (N-term) at 1:2000 dilution Lane 1: A2058 whole cell lysate Lane 2: HeLa whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 17 kDa Blocking/Dilution buffer: 5% NFDN/TBST.



SDHD Antibody (N-term) (Cat. #AP12155a) western blot analysis in HeLa cell line lysates (35ug/lane). This demonstrates the SDHD antibody detected the SDHD protein (arrow).



SDHD Antibody (N-term) (Cat. #AP12155a) immunohistochemistry analysis in formalin fixed and paraffin embedded human kidney tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of SDHD Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



SDHD Antibody (N-term) (Cat. #AP12155a) flow cytometric analysis of HeLa cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

SDHD Antibody (N-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 subunit D protein is one of two integral membrane proteins anchoring the complex to the matrix side of the membrane. Mutations in SDHD have been linked to hereditary paraganglioma.

SDHD Antibody (N-term) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Gill, A.J., et al. Hum. Pathol. 41(6):805-814(2010)
Milosevic, D., et al. Clin. Biochem. 43 (7-8), 700-704 (2010) :
Hermsen, M.A., et al. Cell. Oncol. 32(4):275-283(2010)
Krawczyk, A., et al. Endokrynol Pol 61(1):43-48(2010)