# abcam

### Product datasheet

## Recombinant Human SDHA protein (Tagged) ab226268

## 3 Images

**Description** 

Product name Recombinant Human SDHA protein (Tagged)

Purity > 90 % SDS-PAGE.

Expression system Escherichia coli

Accession P31040

Protein length Protein fragment

Animal free No

Nature Recombinant

**Species** Human

**Sequence** SAKVSDSISAQYPVVDHEFDAVVVGAGGAGLRAAFGLSE

**AGFNTACVTKL** 

FPTRSHTVAAQGGINAALGNMEEDNWRWHFYDTVKGSD

WLGDQDAIHYMT

EQAPAAVVELENYGMPFSRTEDGKIYQRAFGGQSLKFGK

**GGQAHRCCCVA** 

DRTGHSLLHTLYGRSLRYDTSYFVEYFALDLLMENGECRG

**VIALCIEDGS** 

IHRIRAKNTVVATGGYGRTYFSCTSAHTSTGDGTAMITRAGL

**PCQDLEFV** 

Predicted molecular weight 54 kDa including tags

Amino acids 44 to 293

Tags GST tag N-Terminus

#### **Specifications**

Our Abpromise guarantee covers the use of ab226268 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications SDS-PAGE

Mass Spectrometry

Mass spectrometry LC-MS/MS

Form Liquid

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#### **Preparation and Storage**

#### Stability and Storage

Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

Constituents: 50% Glycerol, Tris buffer

#### **General Info**

#### **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).

#### **Pathway**

Carbohydrate metabolism; tricarboxylic acid cycle; fumarate from succinate (eukaryal route): step 1/1.

#### Involvement in disease

Defects in SDHA are a cause of mitochondrial complex II deficiency (MT-C2D) [MIM:252011]. A disorder of the mitochondrial respiratory chain with heterogeneous clinical manifestations. Clinical features include psychomotor regression in infants, poor growth with lack of speech development, severe spastic quadriplegia, dystonia, progressive leukoencephalopathy, muscle weakness, exercise intolerance, cardiomyopathy. Some patients manifest Leigh syndrome or Kearns-Sayre syndrome.

Defects in SDHA are a cause of Leigh syndrome (LS) [MIM:256000]. LS is a severe disorder characterized by bilaterally symmetrical necrotic lesions in subcortical brain regions.

Defects in SDHA are the cause of cardiomyopathy dilated type 1GG (CMD1GG) [MIM:613642].

CMD1GG is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.

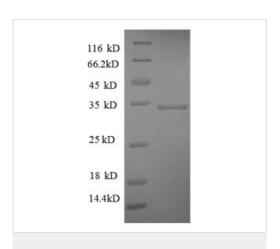
#### Sequence similarities

Belongs to the FAD-dependent oxidoreductase 2 family. FRD/SDH subfamily.

#### **Cellular localization**

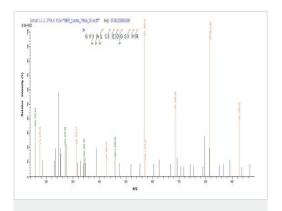
Mitochondrion inner membrane.

#### **Images**



SDS-PAGE - Recombinant Human SDHA protein (Tagged) (ab226268)

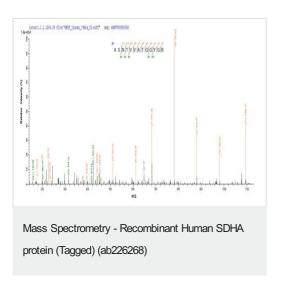
(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) analysis of ab226268 with 5% enrichment gel and 15% separation gel.



Mass Spectrometry - Recombinant Human SDHA

protein (Tagged) (ab226268)

Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS analysis result of ab226268 could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) SDHA.



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Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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