Product Name: NDUFS1 Rabbit Polyclonal Antibody
Catalog #: APRab14513

Summary

Production Name	NDUFS1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	NDUFS1
Alternative Names	NDUFS1; NADH-ubiquinone oxidoreductase 75 kDa subunit; mitochondrial; Complex I-75kD; CI-75kD
Gene ID	4719.0
SwissProt ID	P28331.The antiserum was produced against synthesized peptide derived from human NDUFS1. AA range:620-669

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000..
Molecular Weight	80kD

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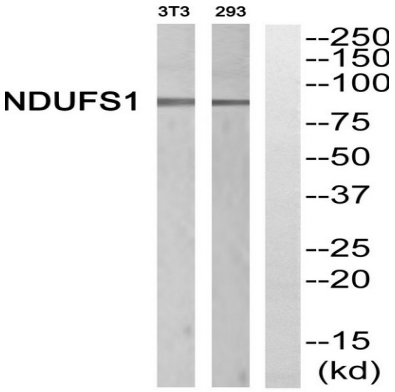
Background

The protein encoded by this gene belongs to the complex I 75 kDa subunit family. Mammalian complex I is composed of 45 different subunits. It locates at the mitochondrial inner membrane. This protein has NADH dehydrogenase activity and oxidoreductase activity. It transfers electrons from NADH to the respiratory chain. The immediate electron acceptor for the enzyme is believed to be ubiquinone. This protein is the largest subunit of complex I and it is a component of the iron-sulfur (IP) fragment of the enzyme. It may form part of the active site crevice where NADH is oxidized. Mutations in this gene are associated with complex I deficiency. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2011],catalytic activity:NADH + acceptor = NAD(+) + reduced acceptor.,catalytic activity:NADH + ubiquinone = NAD(+) + ubiquinol.,cofactor:Binds 1 2Fe-2S cluster per subunit.,cofactor:Binds 2 4Fe-4S clusters per subunit.,disease:Defects in NDUFS1 are a cause of complex I mitochondrial respiratory chain deficiency [MIM:252010]. Complex I (NADH-ubiquinone oxidoreductase), the largest complex of the mitochondrial respiratory chain, contains more than 40 subunits. It is embedded in the inner mitochondrial membrane and is partly protruding in the matrix. Complex I deficiency is the most common cause of mitochondrial disorders. It represents largely one-third of all cases of respiratory chain deficiency and is responsible for a variety of clinical symptoms, ranging from neurological disorders to cardiomyopathy, liver failure, and myopathy.,function:Core subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I) that is believed to belong to the minimal assembly required for catalysis. Complex I functions in the transfer of electrons from NADH to the respiratory chain. The immediate electron acceptor for the enzyme is believed to be ubiquinone (By similarity). This is the largest subunit of complex I and it is a component of the iron-sulfur (IP) fragment of the enzyme. It may form part of the active site crevice where NADH is oxidized.,similarity:Belongs to the complex I 75 kDa subunit family.,similarity:Contains 1 2Fe-2S ferredoxin-type domain.,subunit:Complex I is composed of 45 different subunits.,

Research Area

Oxidative phosphorylation;Alzheimer's disease;Parkinson's disease;Huntington's disease;

Image Data



Western blot analysis of NDUFS1 Antibody. The lane on the right is blocked with the NDUFS1 peptide.

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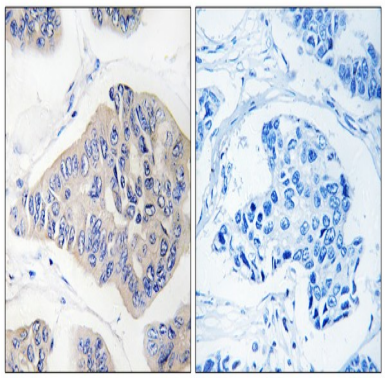
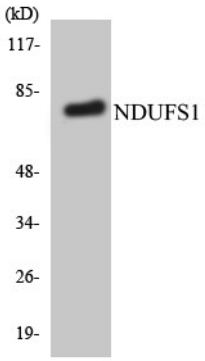


Immunohistochemistryt analysis of paraffin-embedded human breast carcinoma, using NDUFS1 Antibody. The lane on the right is blocked with the NDUFS1 peptide.



Western blot analysis of the lysates from HepG2 cells using NDUFS1 antibody.

Note

For research use only.