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**Product Name: NDUFS1 Rabbit Polyclonal Antibody****Catalog #: APRab14513**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF,ELISA
<b>Reactivity</b>	Human,Mouse,Rat
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:20000-1:40000
<b>Molecular Weight</b>	80kDa

**Antigen Information**

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

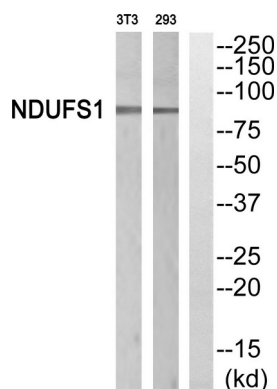
**Background**

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.,

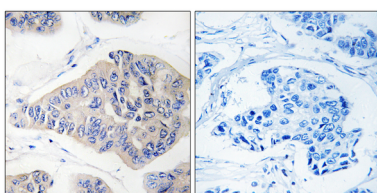
## Research Area

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

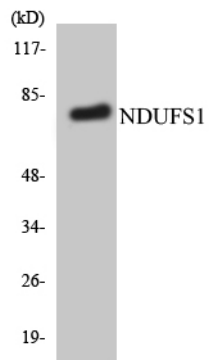
## Image Data



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



Immunohistochemistry 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.