



NDUFS1 Rabbit mAb

Catalog No	YP-rAb-17393
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,IP,ELISA
Gene Name	NDUFS1
Protein Name	NADH-ubiquinone oxidoreductase 75 kDa subunit mitochondrial
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1:1000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	NDUFS1;NADH-ubiquinone oxidoreductase 75 kDa subunit mitochondrial;NDUFS1 ; NADH-ubiquinone oxidoreductase 75 kDa subunit ; mitochondrial ; Complex I-75kD ; CI-75kD
Observed Band	77kD
Calculated Molecular Weight	80kD
Cell Pathway	Mitochondrion inner membrane ; Peripheral membrane protein ; Matrix side .
Tissue Specificity	Brain,Cajal-Retzius cell,Colon,Fetal brain cortex,Liver,
Function	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.,

Background

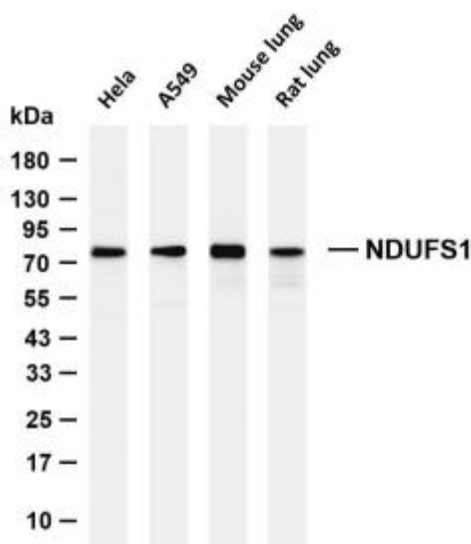
The protein encoded by this gene belongs to the complex I 75 kDa subunit family. Mammalian complex I is composed of 45 different subunits. It locates at the mitochondrial inner membrane. This protein has NADH dehydrogenase activity and oxidoreductase activity. It transfers electrons from NADH to the 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],

matters needing attention

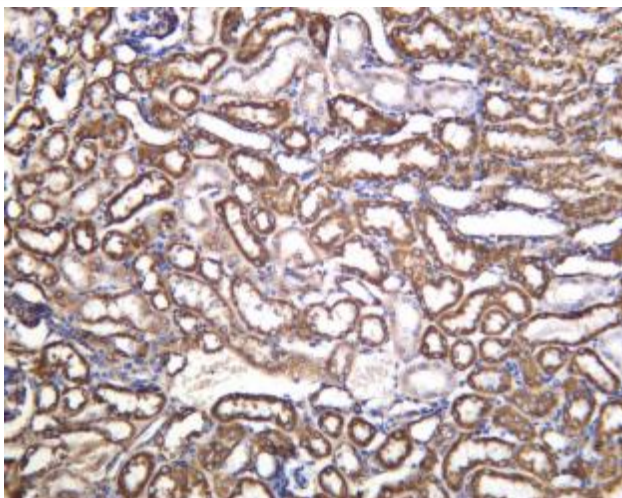
Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

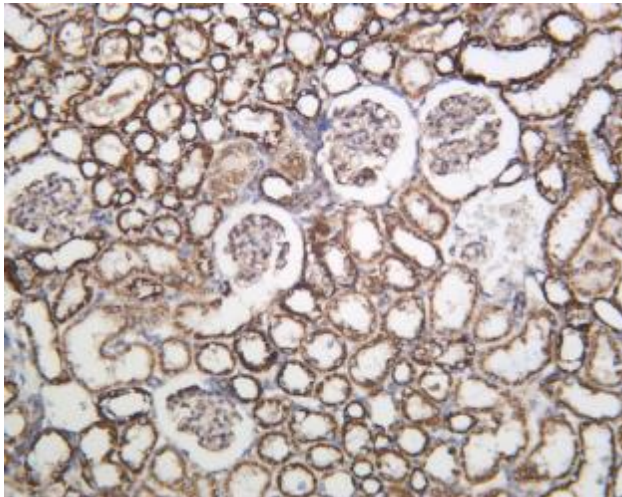


Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-NDUF51 antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: HeLa Lane 2: A549 Lane 3: Mouse lung Lane 4: Rat lung Predicted band size: 80kDa Observed band size: 77kDa

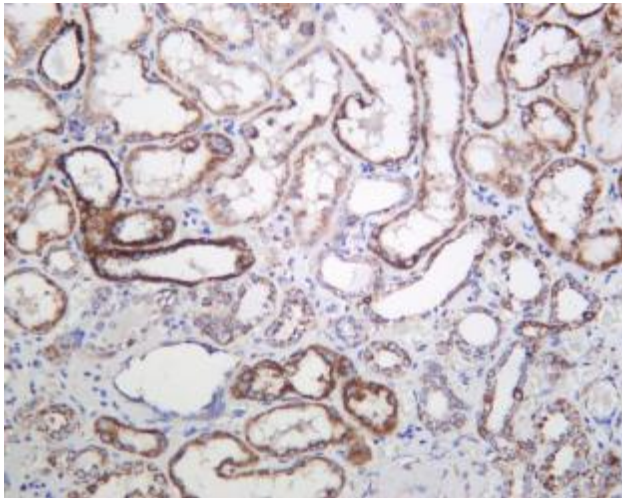


Mouse kidney was stained with anti-NDUF51 Rabbit antibody

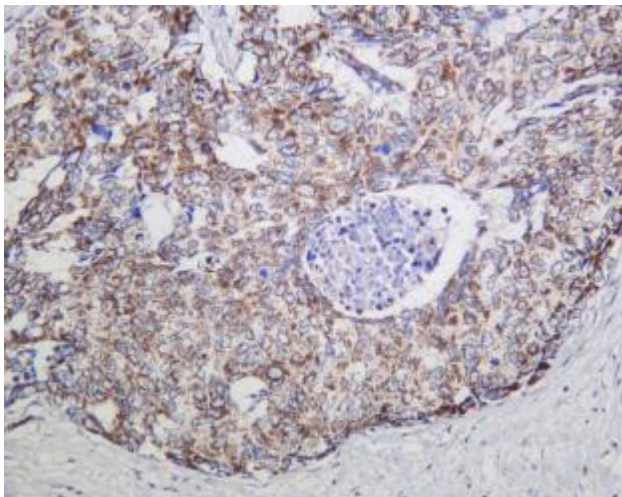




Rat kidney was stained with anti-NDUFS1 Rabbit antibody



Human kidney was stained with anti-NDUFS1 Rabbit antibody



Human prostate was stained with anti-NDUFS1 Rabbit antibody

