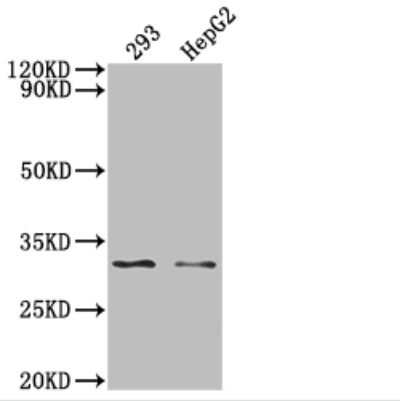
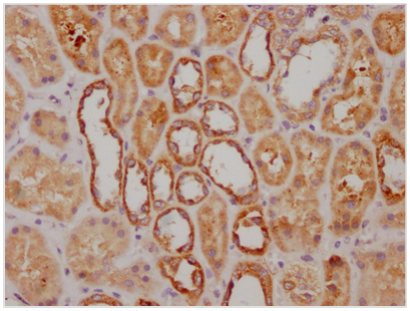
NDUFS3 Antibody

Product Code	CSB-RA224121A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	O75489
Immunogen	A synthesized peptide derived from human NDUFS3
Species Reactivity	Human
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	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).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Cell biology; Metabolism; Signal transduction
Gene Names	NDUFS3
Accession NO.	1H12

Image



Western Blot
Positive WB detected in: 293 whole cell lysate, HepG2 whole cell lysate,
All lanes: NDUFS3 antibody at 1:2000
Secondary
Goat polyclonal to rabbit IgG at 1/50000 dilution
Predicted band size: 31, 15 KDa
Observed band size: 31 kDa



IHC image of CSB-RA224121A0HU diluted at 1:100 and staining in paraffin-embedded human kidney tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

NDUFS3 is a subunit of the NADH: ubiquinone oxidoreductase ETC complex I, which catalyzes the initial stage of electron transfer from NADH to a noncovalently bound flavin mononucleotide and subsequently to the terminal acceptor ubiquinone via a succession of iron-sulfur clusters. NDUFS3 is recruited to the inner mitochondrial membrane to form an early assembly intermediate with NDUFS2 and plays a critical role in the correct assembly of complex I. It starts the complex I assembly process in the mitochondrial matrix. Complex I function is disrupted by NDUFS3 cleavage, resulting in superoxide-dependent but MOMP-independent cell death. NDUFS3 gene missense mutations cause severe encephalomyopathy, including Leigh syndrome (LS).

CUSABIO designed the vector clones for the expression of a recombinant NDUFS3 antibody in mammalian cells. The vector clones were obtained by inserting the NDUFS3 antibody heavy and light chains into the plasma vectors. The recombinant NDUFS3 antibody was purified from the culture medium through Affinity-chromatography. It can be used to detect NDUFS3 protein from Human in the ELISA, WB, IHC.