

Product Name: KD-Validated NDUFA1 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb00493

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000
Molecular Weight	Calculated MW: 8.1kDa

Antigen Information

Gene Name	NDUFA1
Alternative Names	NDUFA1; NADH:Ubiquinone Oxidoreductase Subunit A1; CI-MWFE; MWFE; NADH Dehydrogenase (Ubiquinone) 1 Alpha Subcomplex, 1, 7.5kDa; NADH Dehydrogenase [Ubiquinone] 1 Alpha Subcomplex Subunit 1; NADH-Ubiquinone Oxidoreductase MWFE Subunit; NADH:Ubiquinone Oxidoreductase (Complex 1); Complex I MWFE Subunit; Type I Dehydrogenase; NADH Dehydrogenase (Ubiquinone) 1 Alpha Subcomplex, 1 (7.5kD, MWFE); Complex I-MWFE; MC1DN12; ZNF183
Gene ID	4694.0
SwissProt ID	O15239
Immunogen	A synthesized peptide derived from human NDUFA1

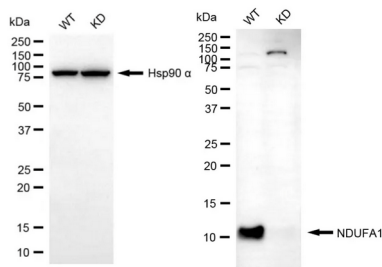
Background

The human NDUFA1 gene codes for an essential component of complex I of the respiratory chain, which transfers electrons from NADH to ubiquinone. It has been noted that the N-terminal hydrophobic domain has the potential to be folded into an alpha-helix spanning the inner mitochondrial membrane with a C-terminal hydrophilic domain interacting with globular subunits of complex I. The highly conserved two-domain structure suggests that this feature is critical for the protein function and might act as an anchor for the NADH:ubiquinone oxidoreductase complex at the inner mitochondrial membrane. However, the NDUFA1 peptide is one of about 31 components of the "hydrophobic protein" (HP) fraction of complex I which is involved in proton translocation. Thus the NDUFA1 peptide may also participate in that function. [provided by RefSeq, Jul 2008]

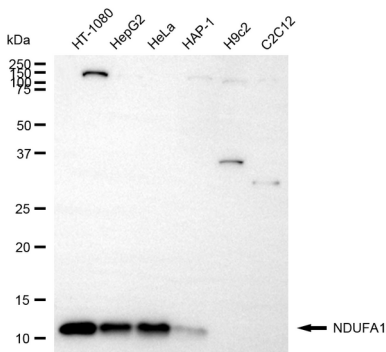
Research Area

Cardiovascular, Neuroscience

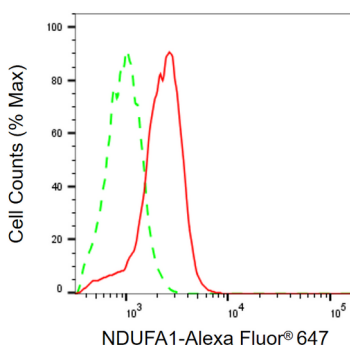
Image Data



Western blotting analysis using NDUFA1 antibody (KVA00493). NDUFA1 expression in wild-type (WT) and NDUFA1 knockdown (KD) HSHC cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with NDUFA1 antibody (KVA00493, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using NDUFA1 antibody (KVA00493). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with NDUFA1 antibody (KVA00493, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Flow cytometric analysis of NDUFA1 expression in HepG2 cells using NDUFA1 antibody (KVA00493, 1:2,000). Green, isotype control; red, NDUFA1.