

Product Name: KD-Validated NDUFB9 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVA01014

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
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; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 21.8kDa

Antigen Information

Gene Name	NDUFB9 NADH:Ubiquinone Oxidoreductase Subunit B9; UQOR22; LYRM3; B22; NADH Dehydrogenase (Ubiquinone) 1 Beta Subcomplex, 9, 22kDa; NADH Dehydrogenase
Alternative Names	[Ubiquinone] 1 Beta Subcomplex Subunit 9; NADH-Ubiquinone Oxidoreductase B22 Subunit; LYR Motif-Containing Protein 3; Complex I B22 Subunit; CI-B22; NADH Dehydrogenase (Ubiquinone) 1 Beta Subcomplex, 9 (22kD, B22); Complex I-B22; MC1DN24
Gene ID	4715.0
SwissProt ID	Q9Y6M9
Immunogen	A synthesized peptide derived from human NDUFB9

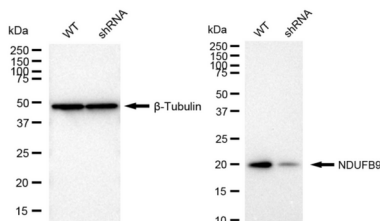
Background

The protein encoded by this gene is a subunit of the mitochondrial oxidative phosphorylation complex I (nicotinamide adenine dinucleotide: ubiquinone oxidoreductase). Complex I is localized to the inner mitochondrial membrane and functions to dehydrogenate nicotinamide adenine dinucleotide and to shuttle electrons to coenzyme Q. Complex I deficiency is the most common defect found in oxidative phosphorylation disorders and results in a range of conditions, including lethal neonatal disease, hypertrophic cardiomyopathy, liver disease, and adult-onset neurodegenerative disorders. Pseudogenes of this gene are found on chromosomes five, seven and eight. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2015]

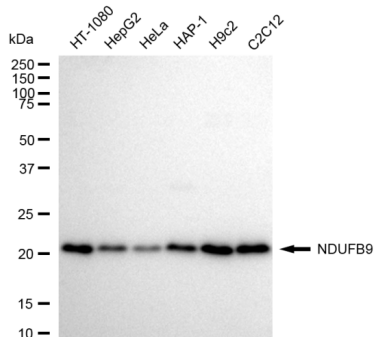
Research Area

Metabolism

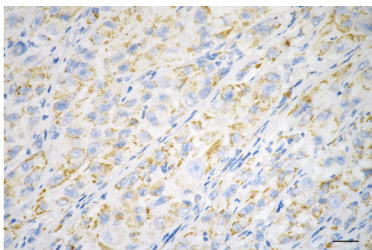
Image Data



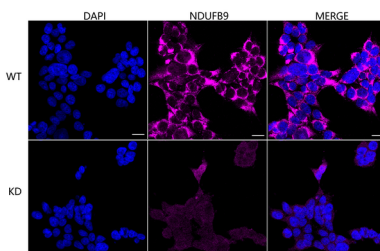
Western blotting analysis using NDUFB9 antibody (KVA01014). NDUFB9 expression in wild type (WT) and NDUFB9 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with NDUFB9 antibody (KVA01014, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



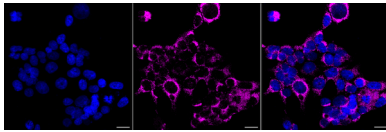
Western blotting analysis using NDUFB9 antibody (KVA01014). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with NDUFB9 antibody (KVA01014, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



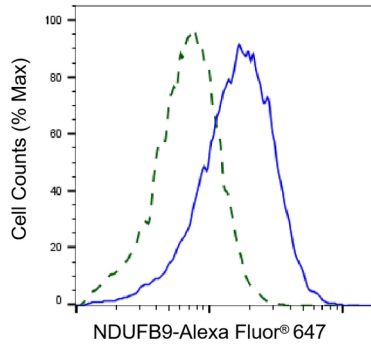
Immunohistochemistry was performed on paraffin-embedded human melanoma using NDUFB9 antibody (KVA01014, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



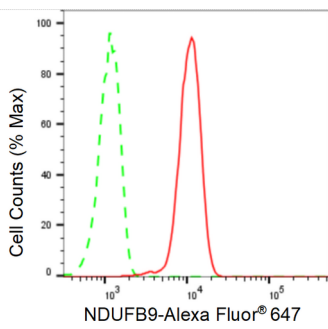
Immunocytochemical staining of HeLa cells using NDUFB9 antibody (KVA01014, 1:1,000). Top panel: wild-type (WT); Bottom panel: NDUFB9 shRNA knockdown (KD). Nuclei were stained blue with DAPI; NDUFB9 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm. Permeabilization: Triton.



Immunocytochemical staining of C2C12 cells with NDUFB9 antibody (KVA01014, 1:1,000). Nuclei were stained blue with DAPI; NDUFB9 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar: 20 µm.



Validation of NDUFB9 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with NDUFB9 antibody (KVA01014, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of NDUFB9 expression in C2C12 cells using NDUFB9 antibody (KVA01014, 1:2,000). Green, isotype control; red, NDUFB9.