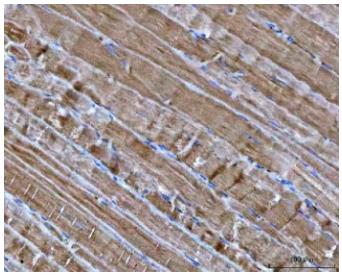
NDUFA1 Antibody (R30746)

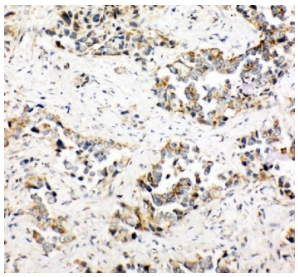
Catalog No.	Formulation	Size
R30746	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

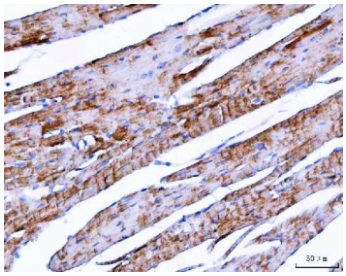
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	O15239
Localization	Cytoplasmic (mitochondria)
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunohistochemistry (Frozen): 2-5ug/ml Immunofluorescence: 5ug/ml Flow cytometry: 1-3ug/million cells
Limitations	This NDUFA1 antibody is available for research use only.



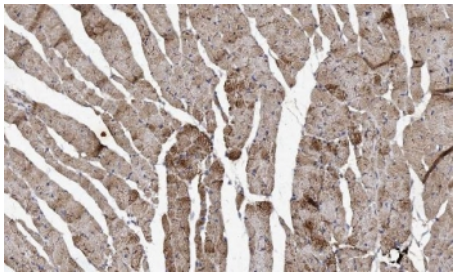
IHC staining of FFPE human skeletal muscle tissue with NDUFA1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



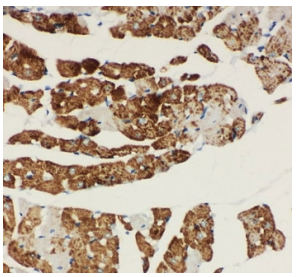
IHC staining of FFPE human lung cancer tissue with NDUFA1 antibody. HIER: boil tissue sections in pH6 citrate buffer for 20 min and allow to cool before testing.



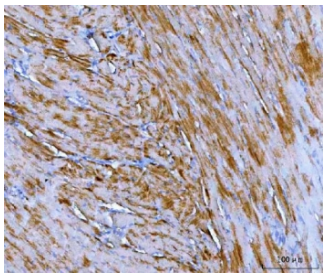
IHC staining of FFPE mouse heart tissue with NDUFA1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



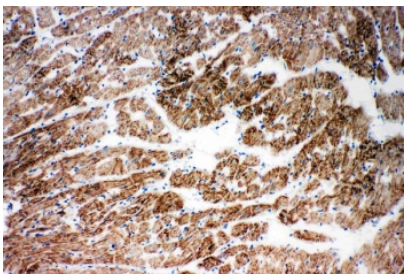
IHC staining of FFPE mouse skeletal muscle tissue with NDUFA1 antibody. HIER: boil tissue sections in pH6 citrate buffer for 20 min and allow to cool before testing.



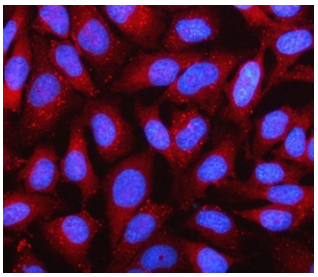
IHC staining of FFPE rat cardiac muscle tissue with NDUFA1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



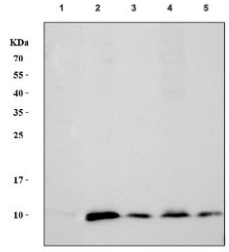
IHC staining of FFPE rat heart tissue with NDUFA1 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



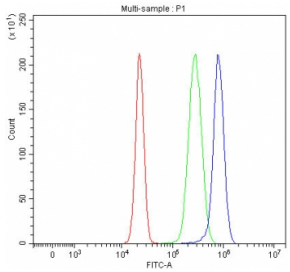
IHC staining of frozen rat cardiac muscle tissue with NDUFA1 antibody.



Immunofluorescent staining of FFPE human HeLa cells with NDUFA1 antibody (red) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing 1) human 293T, 2) rat heart, 3) rat kidney, 4) mouse heart and 5) mouse kidney tissue lysate with NDUFA1 antibody. Predicted molecular weight ~8 kDa.



Flow cytometry testing of human HepG2 cells with NDUFA1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= NDUFA1 antibody.

Description

NADH-ubiquinone oxidoreductase 1 alpha subcomplex 1 is a subunit of mitochondrial NADH: ubiquinone oxidoreductase, also known as mitochondrial complex I. The NDUFA1 gene is mapped to chromosome Xq24. The deduced polypeptide sequence of NDUFA1 was found to have an N-terminal hydrophobic domain, likely to be a transmembrane domain, and a C-terminal hydrophilic domain. And the gene contains 3 exons and spans about 5.0 kb of genomic DNA. Complementation with hamster Ndufa1 cDNA restored the rotenone-sensitive complex I activity of these mutant cells to approximately 100% of the parent cell activity. The findings established that the protein is absolutely essential for an active complex I in mammals. The protein is one of about 31 components of the hydrophobic protein(HP) fraction of complex I which is involved in proton translocation.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the NDUFA1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the C-terminus of human NDUFA1 (ISGVDRYYVSKGLENID) was used as the immunogen for this NDUFA1 antibody.

Storage

After reconstitution, the NDUFA1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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