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NDUFA1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant NDUFA1.
Catalog # AT2998a

Specification

NDUFA1 Antibody (monoclonal) (M01) - Product Information

Application	**WB**
Primary Accession	O15239
Other Accession	BC000266
Reactivity	**Human**
Host	**mouse**
Clonality	**Monoclonal**
Isotype	**IgG1 kappa**
Calculated MW	**8072**

NDUFA1 Antibody (monoclonal) (M01) - Additional Information

Gene ID 4694

Other Names
NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 1, Complex I-MWFE, CI-MWFE, NADH-ubiquinone oxidoreductase MWFE subunit, NDUFA1

Target/Specificity
NDUFA1 (AAH00266, 24 a.a. ~ 70 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution
WB~~1:500~1000

Format
Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage
Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions
NDUFA1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

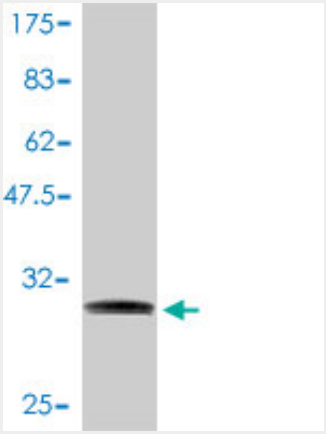
NDUFA1 Antibody (monoclonal) (M01) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot

- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NDUFA1 Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (30.91 KDa) .

NDUFA1 Antibody (monoclonal) (M01) - 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.

NDUFA1 Antibody (monoclonal) (M01) - References

Mitochondrial bioenergetics and dynamics interplay in complex I-deficient fibroblasts. Mor?n M, et al. Biochim Biophys Acta, 2010 May. PMID 20153825.Association study between single-nucleotide polymorphisms in 199 drug-related genes and commonly measured quantitative traits of 752 healthy Japanese subjects. Saito A, et al. J Hum Genet, 2009 Jun. PMID 19343046.A novel NDUFA1 mutation leads to a progressive mitochondrial complex I-specific neurodegenerative disease. Potluri P, et al. Mol Genet Metab, 2009 Apr. PMID 19185523.X-linked NDUFA1 gene mutations associated with mitochondrial encephalomyopathy. Fernandez-Moreira D, et al. Ann Neurol, 2007 Jan. PMID 17262856.Identification of mitochondrial complex I assembly intermediates by tracing tagged NDUFS3 demonstrates the entry point of mitochondrial subunits. Vogel RO, et al. J Biol Chem, 2007 Mar 9. PMID 17209039.