10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NDUFA4 Antibody - middle region
Rabbit Polyclonal Antibody
Catalog # AI16091

Specification

NDUFA4 Antibody - middle region - Product Information

Application	**WB**
Primary Accession	O00483
Other Accession	NP_002480
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**8kDa KDa**

NDUFA4 Antibody - middle region - Additional Information

Gene ID 4697

Alias Symbol	**NDUFA4,**

Other Names
Cytochrome c oxidase subunit NDUFA4, Complex I-MLRQ, CI-MLRQ, NADH-ubiquinone oxidoreductase MLRQ subunit, NDUFA4

Format
Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage
Add 50 &mu, l of distilled water. Final Anti-NDUFA4 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles.

Precautions
NDUFA4 Antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

NDUFA4 Antibody - middle region - Protein Information

Name NDUFA4

Function
Component of the cytochrome c oxidase, the last enzyme in the mitochondrial electron transport chain which drives oxidative phosphorylation. The respiratory chain contains 3 multisubunit complexes succinate dehydrogenase (complex II, CII), ubiquinol- cytochrome c oxidoreductase (cytochrome b-c1 complex, complex III, CIII) and cytochrome c oxidase (complex IV, CIV), that cooperate to transfer electrons derived from NADH and succinate to molecular oxygen, creating an electrochemical gradient over the inner membrane that drives transmembrane transport and the ATP synthase. Cytochrome c oxidase is the component of the respiratory chain that catalyzes the reduction of oxygen to water. Electrons originating from reduced cytochrome c in the

intermembrane space (IMS) are transferred via the dinuclear copper A center (CU(A)) of subunit 2 and heme A of subunit 1 to the active site in subunit 1, a binuclear center (BNC) formed by heme A3 and copper B (CU(B)). The BNC reduces molecular oxygen to 2 water molecules unsing 4 electrons from cytochrome c in the IMS and 4 protons from the mitochondrial matrix (PubMed:22902835). NDUFA4 is required for complex IV maintenance (PubMed:22902835).

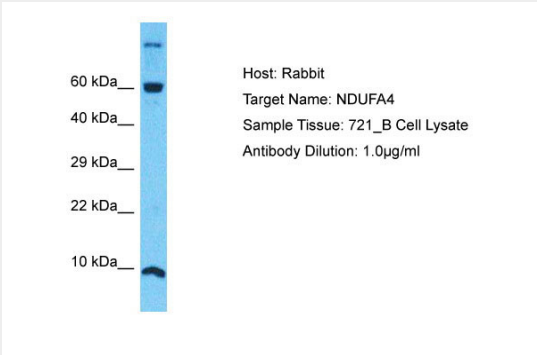
Cellular Location
Mitochondrion inner membrane; Single-pass membrane protein

NDUFA4 Antibody - middle region - 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

NDUFA4 Antibody - middle region - Images



Host: Rabbit
Target Name: NDUFA4
Sample Tissue: 721_B Whole Cell lysates
Antibody Dilution: 1.0µg/ml

NDUFA4 Antibody - middle region - Background

Cytochrome c oxidase (COX, complex IV) is the terminal component of the mitochondrial respiratory chain that catalyzes the reduction of oxygen to water. Required for complex IV maintenance.

NDUFA4 Antibody - middle region - References

Kim J.W.,et al.Biochem. Mol. Biol. Int. 43:669-675(1997).
Kanagarajah D.,et al.Submitted (NOV-1999) to the EMBL/GenBank/DDBJ databases.
Ebert L.,et al.Submitted (MAY-2004) to the EMBL/GenBank/DDBJ databases.
Halleck A.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.

Scherer S.W.,et al.Science 300:767-772(2003).