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NDUFA4 Polyclonal Antibody
Catalog # AP71191

Specification

NDUFA4 Polyclonal Antibody - Product Information

Application	**WB, IHC-P**
Primary Accession	O00483
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**

NDUFA4 Polyclonal Antibody - Additional Information

Gene ID 4697

Other Names
NDUFA4; NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 4; Complex I-MLRQ; CI-MLRQ; NADH-ubiquinone oxidoreductase MLRQ subunit

Dilution
WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
IHC-P~~N/A

Format
Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions
-20℃

NDUFA4 Polyclonal Antibody - 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).

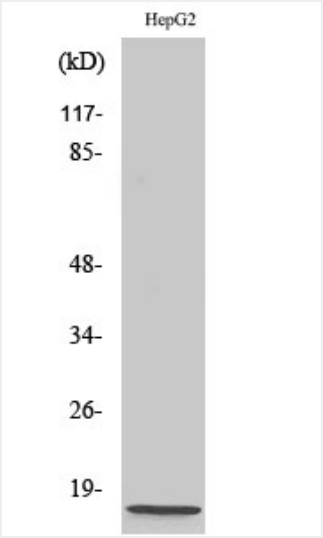
Cellular Location
Mitochondrion inner membrane; Single-pass membrane protein

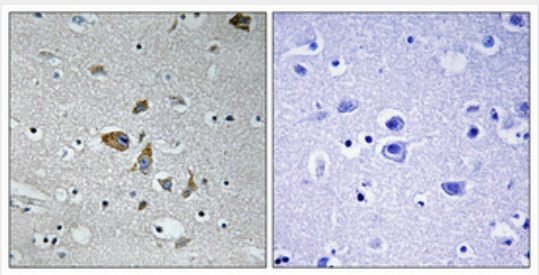
NDUFA4 Polyclonal Antibody - Protocols

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 Polyclonal Antibody - Images





NDUFA4 Polyclonal Antibody - 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.