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Datasheet for ABIN6719648

## anti-Mitochondrially Encoded NADH Dehydrogenase 4 (MT-ND4) (AA 10-459) antibody

### Overview

Quantity:	100 µg
Target:	Mitochondrially Encoded NADH Dehydrogenase 4 (MT-ND4)
Binding Specificity:	AA 10-459
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), ELISA

### Product Details

Purpose:	Rabbit IgG polyclonal antibody for MT-ND4 detection. Tested with WB, Direct ELISA in Human.
Immunogen:	E.coli-derived human MT-ND4 recombinant protein (Position: M10-S459).
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for MT-ND4 detection. Tested with WB, Direct ELISA in Human.
Purification:	Immunogen affinity purified.

### Target Details

Target:	Mitochondrially Encoded NADH Dehydrogenase 4 (MT-ND4)
Alternative Name:	MT-ND4 ( <a href="#">MT-ND4 Products</a> )
Background:	Synonyms: NADH-ubiquinone oxidoreductase chain 4, NADH dehydrogenase subunit 4, MT-

## Target Details

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ND4, MTND4, NADH4, ND4,

Background: NADH-ubiquinone oxidoreductase chain 4 is a protein that in humans is encoded by the mitochondrial gene MT-ND4. MT-ND4 is a subunit of the respiratory chain Complex I that is believed to belong to the minimal assembly of core proteins required to catalyze NADH dehydrogenation and electron transfer to ubiquinone (coenzyme Q10).

Initially, NADH binds to Complex I and transfers two electrons to the isoalloxazine ring of the flavin mononucleotide (FMN) prosthetic arm to form FMNH<sub>2</sub>. The electrons are transferred through a series of iron-sulfur (Fe-S) clusters in the prosthetic arm and finally to coenzyme Q10 (CoQ), which is reduced to ubiquinol (CoQH<sub>2</sub>). The flow of electrons changes the redox state of the protein, resulting in a conformational change and pK shift of the ionizable side chain, which pumps four hydrogen ions out of the mitochondrial matrix.

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Gene ID: 4538

UniProt: [P03905](#)

## Application Details

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Application Notes: Application details: Western blot|0.1-0.5 µg/mL Direct ELISA|0.1-0.5 µg/mL

Comment: Tested Species: In-house tested species with positive results. Other applications have not been tested. Optimal dilutions should be determined by end users.

Restrictions: For Research Use only

## Handling

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Format: Lyophilized

Reconstitution: Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Buffer: Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05 mg Sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Storage: 4 °C, -20 °C

Storage Comment: At -20°C for one year. After reconstitution, at 4°C for one month.  
It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.