
Product Name: ND1 Rabbit Polyclonal Antibody**Catalog #: APRab14463**

For research use only.

Summary

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|----------------------|---|
| Description | Rabbit polyclonal Antibody |
| Host | Rabbit |
| Application | WB,IHC,ICC/IF,ELISA |
| Reactivity | Human,Rat,Mouse |
| Conjugation | Unconjugated |
| Modification | Unmodified |
| Isotype | IgG |
| Clonality | Polyclonal |
| Form | Liquid |
| Concentration | 1mg/ml |
| Storage | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| Shipping | Ice bags |
| Buffer | Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N. |
| Purification | Affinity purification |

Application

| | |
|-------------------------|---|
| Dilution Ratio | WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:20000-1:40000 |
| Molecular Weight | 36kDa |

Antigen Information

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|--------------------------|--|
| Gene Name | MT-ND1 |
| Alternative Names | MT-ND1; MTND1; NADH1; ND1; NADH-ubiquinone oxidoreductase chain 1; NADH dehydrogenase subunit 1 |
| Gene ID | 4535.0 |
| SwissProt ID | P03886 |
| Immunogen | The antiserum was produced against synthesized peptide derived from human MT-ND1. AA range:176-225 |

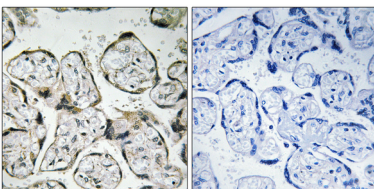
Background

catalytic activity:NADH + ubiquinone = NAD(+) + ubiquinol.,disease:Defects in MT-ND1 are a cause of Leber hereditary optic neuropathy (LHON) [MIM:535000]. LHON is a maternally inherited disease resulting in acute or subacute loss of central vision, due to optic nerve dysfunction. Cardiac conduction defects and neurological defects have also been described in some patients. LHON results from primary mitochondrial DNA mutations affecting the respiratory chain complexes.,disease:Defects in MT-ND1 are a cause of mitochondrial encephalomyopathy with lactic acidosis and stroke-like episodes syndrome (MELAS) [MIM:540000]. MELAS is a genetically heterogenous disorder, characterized by episodic vomiting, seizures, and recurrent cerebral insults resembling strokes and causing hemiparesis, hemianopsia, or cortical blindness.,disease:Defects in MT-ND1 may be associated with mitochondrial susceptibility to Alzheimer disease (AD) [MIM:502500].,disease:Defects in MT-ND1 may be associated with non-insulin-dependent diabetes mellitus (NIDDM).,function:Core subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I) that is believed to belong to the minimal assembly required for catalysis. Complex I functions in the transfer of electrons from NADH to the respiratory chain. The immediate electron acceptor for the enzyme is believed to be ubiquinone.,similarity:Belongs to the complex I subunit 1 family.,catalytic activity:NADH + ubiquinone = NAD(+) + ubiquinol.,disease:Defects in MT-ND1 are a cause of Leber hereditary optic neuropathy (LHON) [MIM:535000]. LHON is a maternally inherited disease resulting in acute or subacute loss of central vision, due to optic nerve dysfunction. Cardiac conduction defects and neurological defects have also been described in some patients. LHON results from primary mitochondrial DNA mutations affecting the respiratory chain complexes.,disease:Defects in MT-ND1 are a cause of mitochondrial encephalomyopathy with lactic acidosis and stroke-like episodes syndrome (MELAS) [MIM:540000]. MELAS is a genetically heterogenous disorder, characterized by episodic vomiting, seizures, and recurrent cerebral insults resembling strokes and causing hemiparesis, hemianopsia, or cortical blindness.,disease:Defects in MT-ND1 may be associated with mitochondrial susceptibility to Alzheimer disease (AD) [MIM:502500].,disease:Defects in MT-ND1 may be associated with non-insulin-dependent diabetes mellitus (NIDDM).,function:Core subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I) that is believed to belong to the minimal assembly required for catalysis. Complex I functions in the transfer of electrons from NADH to the respiratory chain. The immediate electron acceptor for the enzyme is believed to be ubiquinone.,similarity:Belongs to the complex I subunit 1 family.,

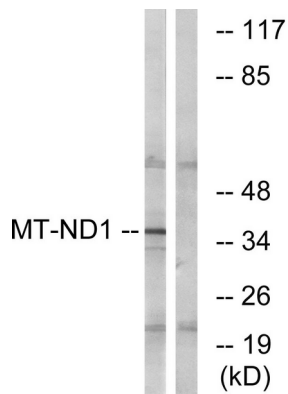
Research Area

Oxidative phosphorylation;Parkinson's disease;

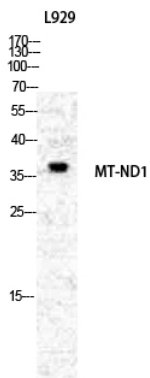
Image Data



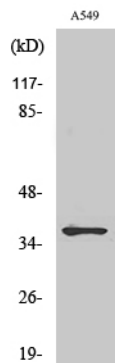
Immunohistochemistry analysis of paraffin-embedded human placenta tissue, using MT-ND1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from Jurkat cells, using MT-ND1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using ND1 Polyclonal Antibody diluted at 1 : 1000



Western Blot analysis of COLO205 cells using ND1 Polyclonal Antibody diluted at 1 : 1000