

Product Name: ND1 Rabbit Polyclonal Antibody
Catalog #: APRab14463



Summary

Production Name	ND1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC, WB,
Reactivity	Human, Rat, Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

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. The antiserum was produced against synthesized peptide derived from human MT-ND1. AA range: 176-225

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000..
Molecular Weight	36kD

Background

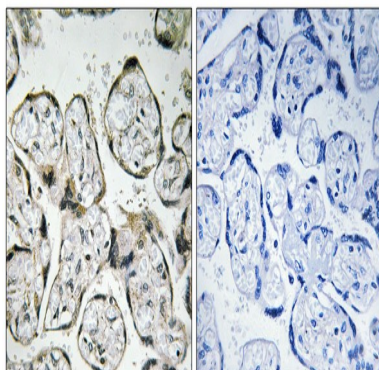
catalytic activity:NADH + ubiquinone = NAD(+) + ubiquinol.,disease:Defects in MT-ND1 are a cause of Leber hereditary optic neuropathy (LHON) [MIM:535000]. LHON is a maternally inherited disease resulting in acute or subacute loss of central vision, due to optic nerve dysfunction. Cardiac conduction defects 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

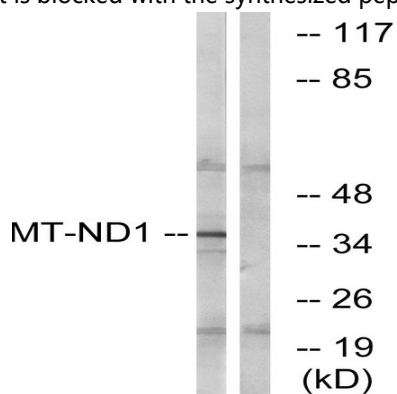
Oxidative phosphorylation;Parkinson's disease;

Image Data

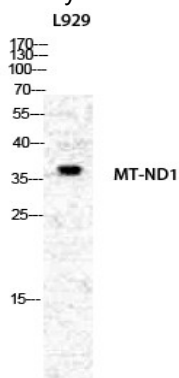
Product Name: ND1 Rabbit Polyclonal Antibody
Catalog #: APRab14463



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

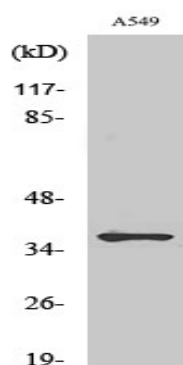


Western blot analysis of lysates from Jurkat cells, using MT-ND1 Antibody. The lane on the right is blocked with the synthesized peptide.



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

Product Name: ND1 Rabbit Polyclonal Antibody
Catalog #: APRab14463



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

Note

For research use only.