ELK Biotechnology

ND1 rabbit pAb

Cat No.:ES2904

For research use only

Overview

Product Name	ND1 rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Rat;Mouse;
Recommended dilutions	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human MT-ND1. AA range:176-225
Specificity	ND1 Polyclonal Antibody detects endogenous levels of ND1 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	NADH-ubiquinone oxidoreductase chain 1
Gene Name	MT-ND1
Cellular localization	Mitochondrion inner membrane ; Multi-pass membrane protein .
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal
Concentration	1 mg/ml
Observed band	36kD
Human Gene ID	4535
Human Swiss-Prot Number	P03886
Alternative Names	MT-ND1; MTND1; NADH1; ND1; NADH-ubiquinone oxidoreductase chain 1; NADH dehydrogenase subunit 1
Background	catalytic activity:NADH + ubiquinone = NAD(+) + ubiquinol.,disease:Defects in MT-ND1 are a cause of Leber hereditary optic neuropathy (LHON)

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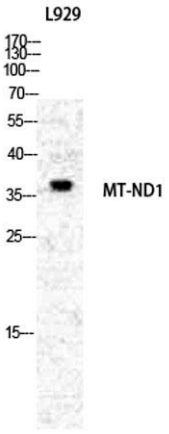
[MIM:535000]. LHON is a maternally inherited disease resulting in acute or subacute loss of central vision, due to optic nerve dysfunction. Cardiac conduction defects and neurological defects have also been described in some patients. LHON results from primary mitochondrial DNA mutations affecting the 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 heterogenious 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.,



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

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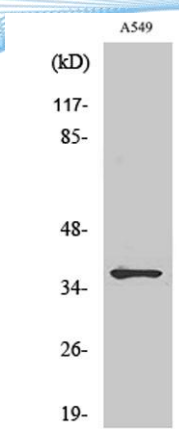
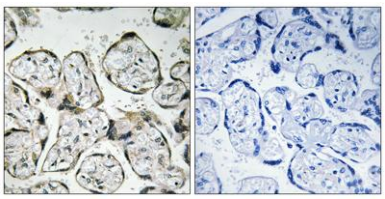
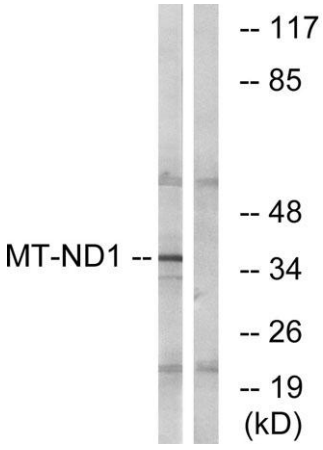


Western Blot analysis of COLO205 cells using ND1 Polyclonal Antibody diluted at 1:1000



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.

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