

ND1 Polyclonal Antibody

Catalog No: YT3000

Reactivity: Human; Rat

Applications: WB;IHC;IF;ELISA

Target: ND1

Fields: >>Oxidative phosphorylation;>>Metabolic

pathways;>>Thermogenesis;>>Retrograde endocannabinoid

signaling;>>Alzheimer disease;>>Parkinson disease;>>Amyotrophic lateral

sclerosis;>>Huntington disease;>>Prion disease;>>Pathways of

neurodegeneration - multiple diseases;>>Chemical carcinogenesis - reactive

oxygen species;>>Diabetic cardiomyopathy

Gene Name: MT-ND1

Protein Name: NADH-ubiquinone oxidoreductase chain 1

P03886

P03888

Human Gene Id: 4535

Human Swiss Prot

No:

Mouse Swiss Prot

No:

<u>____</u>

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.

Source: Polyclonal, Rabbit, IgG

Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:40000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.



Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 36kD

Cell Pathway: Oxidative phosphorylation; Parkinson's disease;

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 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.,

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Subcellular Location:

Mitochondrion inner membrane; Multi-pass membrane protein.

Expression: Blood, Bone fossil, Bones, Breast cancer, Distant normal tissue, Glioma,



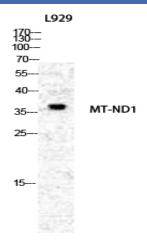
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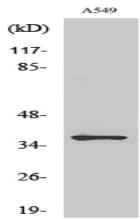
Host: Rabbit

Modifications: Unmodified

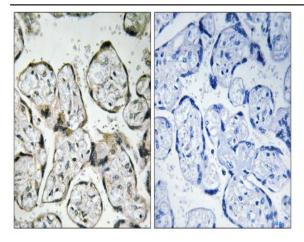
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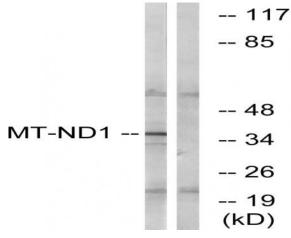
Western Blot analysis of various cells using ND1 Polyclonal Antibody diluted at 1:1000



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



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.