Best Tools for immunology Research

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
Human Gene Id :	4535
Human Swiss Prot No :	P03886
Mouse Swiss Prot No :	P03888
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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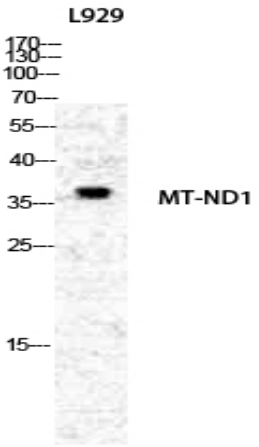
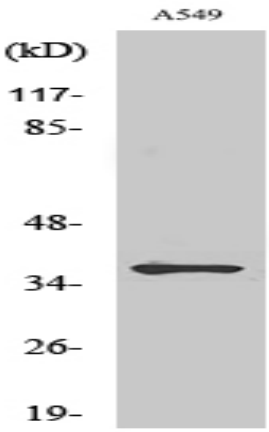
Subcellular Location : Mitochondrion inner membrane ; Multi-pass membrane protein .

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

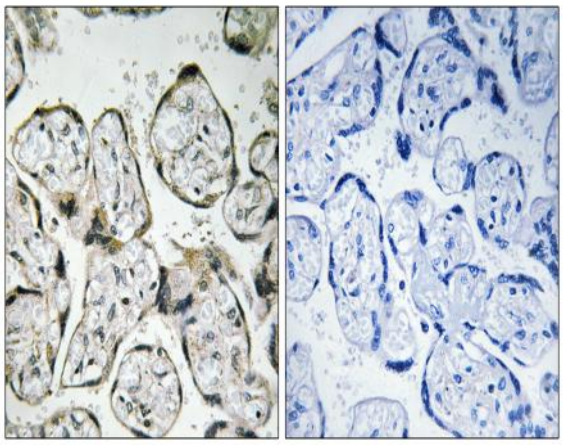
Products Images



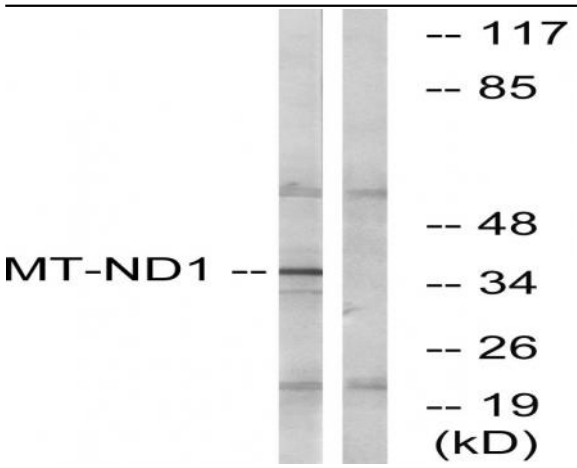
Western Blot analysis of various cells using ND1 Polyclonal Antibody diluted at 1:1000



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.