SunLong Biotech Co.,LTD
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**[ Primary Antibody ]**

# Rabbit Anti-MT-ND6 antibody

**Catalog Number: SL22462R**

**FOR RESEARCH USE ONLY**

**[ DATASHEET ]**

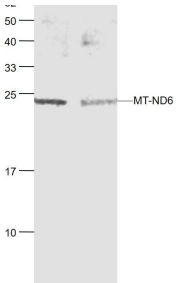
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|---|---|
| **Host:** | Rabbit |
| **Isotype:** | IgG |
| **Clonality:** | Polyclonal |
| **Target:** | MT-ND6 |
| **Immunogen:** | KLH conjugated synthetic peptide derived from mouse MT-ND6: 31-130/172 |
| **Purification:** | affinity purified by Protein A |
| **Concentration:** | 1mg/ml |
| **Storage:** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. |
| **Applications:** | WB=1:500-2000<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user. |
| **Reactivity:** | Mouse,Rat<br>(predicted:Rabbit) |
| **Predicted MW.:** | 19kDa |
| **Subcellular Location:** | cytoplasmic |
| **Background:** | NADH Dehydrogenase subunit 6 (MTND6) is 1 of the 7 mitochondrial DNA (mtDNA) encoded subunits (MTND1, MTND2, MTND3, MTND4L, MTND4, MTND5, MTND6) included among the approximately 41 polypeptides of respiratory Complex I. Complex I accepts electrons from NADH, transfers them to ubiquinone (Coenzyme Q10), and uses the energy released to pump protons across the mitochondria inner membrane. MTND6 has been proposed to be a component of the iron-protein fragment.<br>**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 (By similarity).<br>**Subcellular Location:** Mitochondrion membrane; Multi-pass membrane protein (Potential). |

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|---|---|
| | DISEASE: Defects in MT-ND6 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.<br>Defects in MT-ND6 are a cause of Leber hereditary optic neuropathy with dystonia (LDYT) [MIM:500001]; also called familial dystonia with visual failure and striatal lucencies. LDYT is part of a spectrum of Leber hereditary optic neuropathy. It is characterized by the association of optic atrophy and central vision loss with dystonia.<br>Defects in MT-ND6 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.<br>Defects in MT-ND6 are a cause of mitochondrial complex I deficiency (MT-C1D) [MIM:252010]. A disorder of the mitochondrial respiratory chain that causes a wide range of clinical manifestations from lethal neonatal disease to adult-onset neurodegenerative disorders. Phenotypes include macrocephaly with progressive leukodystrophy, non-specific encephalopathy, cardiomyopathy, myopathy, liver disease, Leigh syndrome, Leber hereditary optic neuropathy, and some forms of Parkinson disease.<br>**Similarity:** Belongs to the complex I subunit 6 family.<br>**Database links:**<br>**Entrez Gene:** 4541 Human<br>Omim: 516006 Human<br>**SwissProt:** P03923 Human<br>**SwissProt:** O79882 Pig |

## [ VALIDATION IMAGES ]




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Sample:
Spleen (Mouse) Lysate at 40 ug
Spleen (Rat) Lysate at 40 ug
Primary: Anti-MT-ND6 (SL22462R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 24 kD
Observed band size: 24 kD

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