10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NDUFA1 Rabbit pAb

Catalog # AP100146

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	O15239
Other Accession	O15239
Reactivity	Mouse
Predicted	Rat, Human, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	8072
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human NDUFA1
Epitope Specificity	31-70/70
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the complex I NDUFA1 subunit family.
SUBUNIT	Complex I is composed of 45 different subunits.
DISEASE	Defects in NDUFA1 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 disorders, 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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	NDUFA1 (NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 1) is an essential component of the multisubunit NADH ubiquinone oxidoreductase (complex 1), the first enzyme complex in the mitochondrial respiratory chain. Complex I transfers electrons from NADH to the respiratory chain via ubiquinone.

Additional Information

Gene ID	4694
Other Names	NDUA1_HUMAN; NDUFA1; Complex I-MWFE (CI-MWFE); NADH-ubiquinone oxidoreductase MWFE subunit; CI-MWFE; MC1DN12; MWFE; ZNF183; NADH:ubiquinone oxidoreductase subunit A1; NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 1 (7.5kD, MWFE); NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 1, 7.5kDa; NADH:ubiquinone oxidoreductase (complex 1); type I dehydrogenase; complex I MWFE subunit
	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Dilution	
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	NDUFA1
Function	Accessory subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I), that is believed not to be involved in 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.
Cellular Location	Mitochondrion inner membrane; Single-pass membrane protein; Matrix side
Tissue Location	Primarily expressed in heart and skeletal muscle.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.