

# Immunotag™ NDUFS1 Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT3017
Product Description	Immunotag™ NDUFS1 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	NDUFS1
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from NDUFS1, at AA range: 590-670
Specificity	NDUFS1 Polyclonal Antibody detects endogenous levels of NDUFS1 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	NDUFS1
Accession No.	P28331 Q91VD9 Q66HF1
Alternate Names	NDUFS1; NADH-ubiquinone oxidoreductase 75 kDa subunit; mitochondrial; Complex I-75kD; CI-75kD

## Antibody Specification

Description	NADH:ubiquinone oxidoreductase core subunit S1(NDUFS1) Homo sapiens The protein encoded by this gene belongs to the complex I 75 kDa subunit family. Mammalian complex I is composed of 45 different subunits. It locates at the mitochondrial inner membrane. This protein has NADH dehydrogenase activity and oxidoreductase activity. It transfers electrons from NADH to the respiratory chain. The immediate electron acceptor for the enzyme is believed to be ubiquinone. This protein is the largest subunit of complex I and it is a component of the iron-sulfur (IP) fragment of the enzyme. It may form part of the active site crevice where NADH is oxidized. Mutations in this gene are associated with complex I deficiency. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2011],
Cell Pathway/ Category	Oxidative phosphorylation,Alzheimer's disease,Parkinson's disease,Huntington's disease,
Protein Expression	Brain,Cajal-Retzius cell,Colon,Fetal brain cortex,Liver,
Subcellular Localization	mitochondrion,mitochondrial respiratory chain complex I,mitochondrial intermembrane space,mitochondrial matrix,membrane,myelin sheath,
Protein Function	catalytic activity:NADH + acceptor = NAD(+) + reduced acceptor.,catalytic activity:NADH + ubiquinone = NAD(+) + ubiquinol.,cofactor:Binds 1 2Fe-2S cluster per subunit.,cofactor:Binds 2 4Fe-4S clusters per subunit.,disease:Defects in NDUFS1 are a cause of complex I mitochondrial respiratory chain deficiency [MIM:252010]. Complex I (NADH-ubiquinone oxidoreductase), the largest complex of the mitochondrial respiratory chain, contains more than 40 subunits. It is embedded in the inner mitochondrial membrane and is partly protruding in the matrix. Complex I deficiency is the most common cause of mitochondrial disorders. It represents largely one-third of all cases of respiratory chain deficiency and is responsible for a variety of clinical symptoms, ranging from neurological disorders to cardiomyopathy, liver failure, and myopathy.,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). This is the largest subunit of complex I and it is a component of the iron-sulfur (IP) fragment of the enzyme. It may form part of the active site crevice where NADH is oxidized.,similarity:Belongs to the complex I 75 kDa subunit family.,similarity:Contains 1 2Fe-2S ferredoxin-type domain.,subunit:Complex I is composed of 45 different subunits.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.