

# NDUFAB1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP57382

#### **Product Information**

**Application** IHC-P, IHC-F, IF, ICC, E

Primary Accession <u>014561</u>

**Reactivity** Rat, Pig, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 17417
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human NDUFAB1

Epitope Specificity 61-156/156

**Isotype** IgG

**Purity** affinity purified by Protein A

**Buffer** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

**SUBCELLULAR LOCATION** Mitochondrion.

**SIMILARITY** Contains 1 acyl carrier domain.

**SUBUNIT** Mammalian complex I is composed of 45 different subunits.

**Important Note** This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

### **Additional Information**

**Gene ID** 4706

Other Names Acyl carrier protein, mitochondrial, ACP, CI-SDAP, NADH-ubiquinone

oxidoreductase 9.6 kDa subunit, NDUFAB1

**Dilution** IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-

10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

**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 NDUFAB1 ( HGNC:7694)

**Function** Carrier of the growing fatty acid chain in fatty acid biosynthesis (By

similarity) (PubMed: 27626371). Accessory and non-catalytic subunit of the

mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I), which functions in the transfer of electrons from NADH to the respiratory chain (PubMed:27626371). Accessory protein, of the core iron-sulfur cluster (ISC) assembly complex, that regulates, in association with LYRM4, the stability and the cysteine desulfurase activity of NFS1 and participates in the [2Fe-2S] clusters assembly on the scaffolding protein ISCU (PubMed:31664822). The core iron-sulfur cluster (ISC) assembly complex is involved in the de novo synthesis of a [2Fe-2S] cluster, the first step of the mitochondrial iron-sulfur protein biogenesis. This process is initiated by the cysteine desulfurase complex (NFS1:LYRM4:NDUFAB1) that produces persulfide which is delivered on the scaffold protein ISCU in a FXN-dependent manner. Then this complex is stabilized by FDX2 which provides reducing equivalents to accomplish the [2Fe-2S] cluster assembly. Finally, the [2Fe-2S] cluster is transferred from ISCU to chaperone proteins, including HSCB, HSPA9 and GLRX5 (By similarity).

#### **Cellular Location**

Mitochondrion

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