

NDUFS1 Monoclonal antibody

Catalog Number: 68253-1-Ig 1 Publications

Basic Information

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| Catalog Number: 68253-1-Ig | GenBank Accession Number: BC030833 | Purification Method: Protein G purification |
| Size: 500 ug/ml | GeneID (NCBI): 4719 | CloneNo.: 3H5E8 |
| Source: Mouse | UNIPROT ID: P28331 | Recommended Dilutions: WB 1:5000-1:50000 IHC 1:500-1:2000 IF/ICC 1:400-1:1600 |
| Isotype: IgG1 | Full Name: NADH dehydrogenase (ubiquinone) Fe-S protein 1, 75kDa (NADH-coenzyme Q reductase) | |
| Immunogen Catalog Number: AG3135 | Calculated MW: 727 aa, 79 kDa Observed MW: 68-81 kDa | |

Applications

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| Tested Applications: WB, IHC, IF/ICC, ELISA | Positive Controls: WB : pig brain tissue, HeLa cells, rabbit brain tissue, rat brain tissue, mouse brain tissue, pig heart tissue, rat heart tissue, mouse heart tissue |
| Cited Applications: IF | IHC : mouse heart tissue, IF/ICC : HepG2 cells, HeLa cells |
| Species Specificity: human, mouse, rat, pig, rabbit | |
| Cited Species: rat | |
| Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 | |

Background Information

The multisubunit NADH:ubiquinone oxidoreductase (75 kDa subunit, mitochondrial)(NDUFS1) is the first enzyme complex in the electron transport chain of mitochondria. It is also named as Complex I-75kD. By use of chaotropic agents, complex I can be fragmented into 3 different fractions: a flavoprotein fraction, an iron-sulfur protein (IP) fraction, and a hydrophobic protein (HP) fraction. NDUFS1 is the largest subunit of complex I and it is a component of the iron-sulfur (IP) fragment of the enzyme. NDUFS1 has some isoforms with the molecular mass of 68-81 kDa.

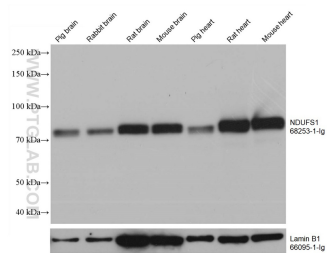
Notable Publications

| Author | Pubmed ID | Journal | Application |
|-----------|-----------|----------------|-------------|
| Yixin Fan | 38991331 | Arch Oral Biol | IF |

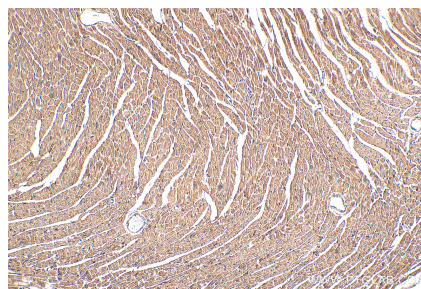
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

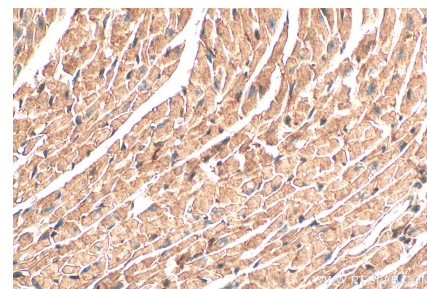
Selected Validation Data



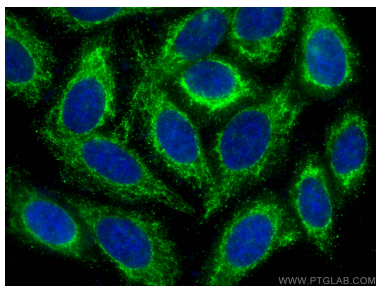
Various lysates were subjected to SDS PAGE followed by western blot with 68253-1-Ig (NDUFS1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with Lamin B1 Monoclonal antibody (66095-1-Ig) as loading control.



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 68253-1-Ig (NDUFS1 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 68253-1-Ig (NDUFS1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using NDUFS1 antibody (68253-1-Ig, Clone: 3H5E8) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).