

For Research Use Only

# NDUFS1 Polyclonal antibody

Catalog Number: 12444-1-AP

Featured Product

86 Publications



## Basic Information

### Catalog Number:

12444-1-AP

### Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG3135

### GenBank Accession Number:

BC030833

### GeneID (NCBI):

4719

### UNIPROT ID:

P28331

### Full Name:

NADH dehydrogenase (ubiquinone) Fe-S protein 1, 75kDa (NADH-coenzyme Q reductase)

### Calculated MW:

727 aa, 79 kDa

### Observed MW:

74-81 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:2000-1:10000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:250-1:1000

IF/ICC: 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, CoIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, drosophila

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

WB: mouse kidney tissue, mouse liver tissue, HEK-293 cells, A549 cells, HeLa cells, HEK-293 tissue, rat kidney tissue

IP: mouse lung tissue,

IHC: human liver cancer tissue,

IF/ICC: HepG2 cells,

## 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
Shao-Ming Shen	26415504	EMBO Rep	WB
Yang Ni	31557978	Cells	WB
Rufeng Zhang	31530015	FASEB J	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

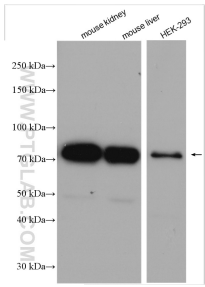
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

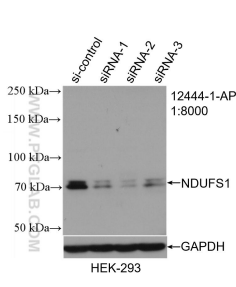
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

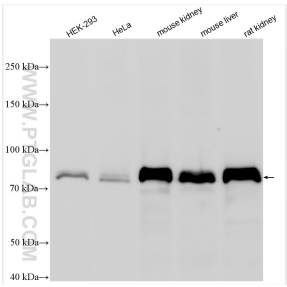
Selected Validation Data



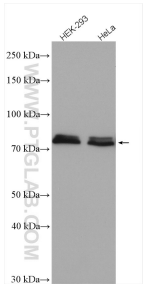
Various lysates were subjected to SDS PAGE followed by western blot with 12444-1-AP (NDUFS1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



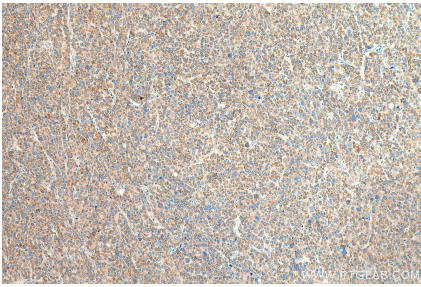
WB result of NDUFS1 antibody (12444-1-AP; 1:8000; incubated at room temperature for 1.5 hours) with sh-Control and sh-NDUFS1 transfected HEK-293 cells.



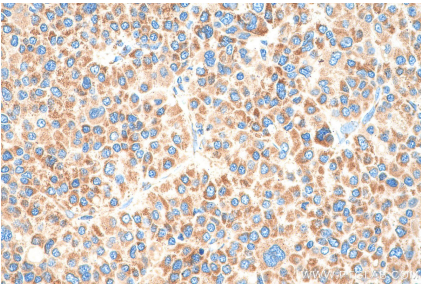
Various lysates were subjected to SDS PAGE followed by western blot with 12444-1-AP (NDUFS1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



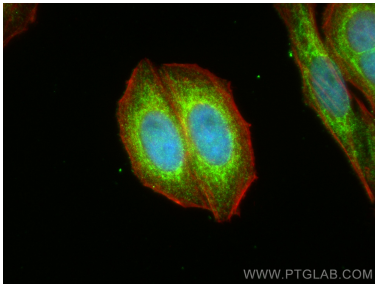
Various lysates were subjected to SDS PAGE followed by western blot with 12444-1-AP (NDUFS1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



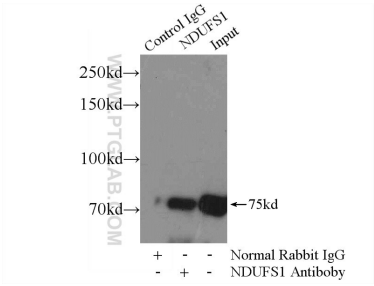
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 12444-1-AP (NDUFS1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 12444-1-AP (NDUFS1 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using NDUFS1 antibody (12444-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).



IP result of anti-NDUFS1 (IP:12444-1-AP, 4ug; Detection:12444-1-AP 1:500) with mouse lung tissue lysate 2800ug.