For Research Use Only

NDUFS1 Polyclonal antibody

Catalog Number:12444-1-AP Featured Product 86 Publications

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Basic Information

Catalog Number:
12444-1-AP

Concentration:
450 μg/ml

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

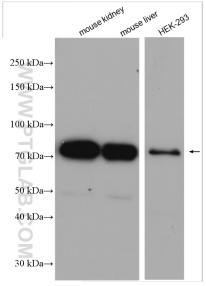
Author	Pubmed ID	Journal	Application
Shao-Ming Shen	26415504	EMBO Rep	WB
Yang Ni	31557978	Cells	WB
Rufeng Zhang	31530015	FASEB J	WB

Storage

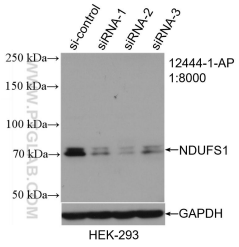
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

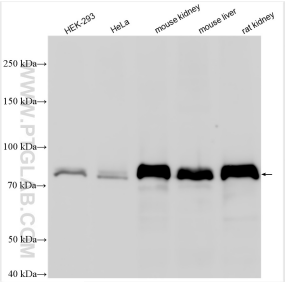
Selected Validation Data



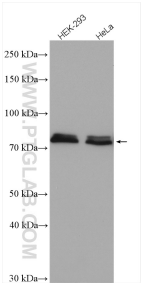
Various lysates were subjected to SDS PAGE followed by western blot with 12444-1-AP (NDUFS1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



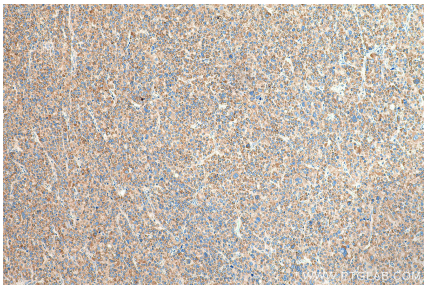
WB result of NDUFS1 antibody (12444-1-AP; 1:8000; incubated at room temperature for 1.5 hours) with sh-Control and sh-NDUFS1 transfected HEK-293 cells.



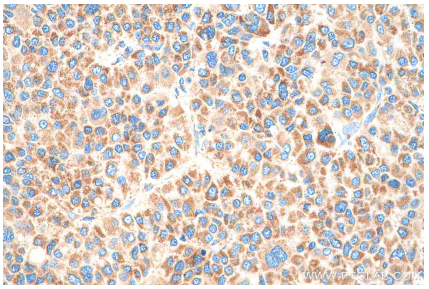
Various lysates were subjected to SDS PAGE followed by western blot with 12444-1-AP (NDUFS1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



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.

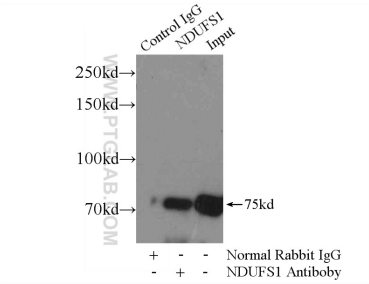


Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 12444-1-AP (NDUFS1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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.