

For Research Use Only

# NNT Polyclonal antibody

Catalog Number: 13442-2-AP

Featured Product

15 Publications



## Basic Information

### Catalog Number:

13442-2-AP

### Size:

150ul, Concentration: 600 ug/ml by Nanodrop and 333 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG4259

### GenBank Accession Number:

BC032370

### GeneID (NCBI):

23530

### UNIPROT ID:

Q13423

### Full Name:

nicotinamide nucleotide transhydrogenase

### Calculated MW:

1085 aa, 114 kDa

### Observed MW:

114 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:1000

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

IHC 1:20-1:200

IF/ICC 1:50-1:500

## 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

### Positive Controls:

WB : human adrenal gland tissue, human heart tissue, human liver tissue

IP : HepG2 cells,

IHC : human liver cancer tissue,

IF/ICC : HeLa cells,

**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

NNT(nicotinamide nucleotide transhydrogenase) is a transmembrane protein and functions as a proton pumping transhydrogenase. The protein is present in both prokaryotes and eukaryotes and is located in the inner membrane of mitochondria. In prokaryotic cells, the enzyme is composed of  $\alpha$  and  $\beta$  subunits of 54 and 48 kDa, respectively. In eukaryotic cells, the enzyme is usually composed of a single peptide of 110 kDa. Although NNT catalyzes the interconversion of NADH and NADPH, the forward reaction using the reducing power of NADH to regenerate NADPH would be favored under conditions of oxidative stress(PMID:16497723). It can exist as a homodimer(PMID:21882037).

## Notable Publications

Author	Pubmed ID	Journal	Application
Miaomiao Li	34545694	Am J Med Genet A	WB
Guangjian Jiang	27832638	Cell Physiol Biochem	WB
Lei Wu	29116185	Sci Rep	WB

## 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

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

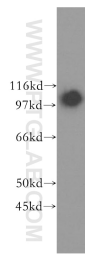
For technical support and original validation data for this product please contact:

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

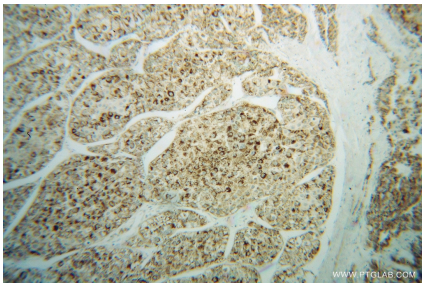
E: proteintech@ptglab.com  
W: ptglab.com

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

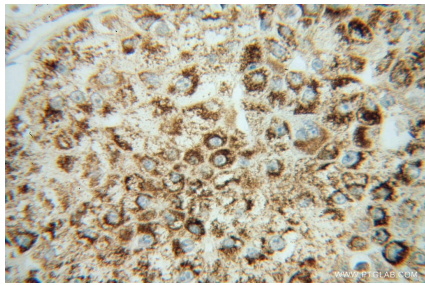
Selected Validation Data



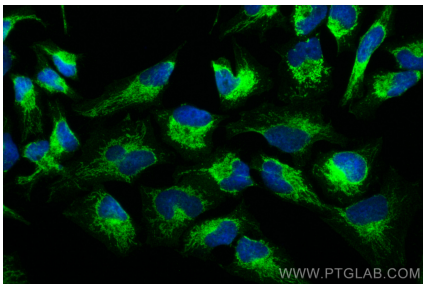
human adrenal gland tissue were subjected to SDS PAGE followed by western blot with 13442-2-AP (NNT antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



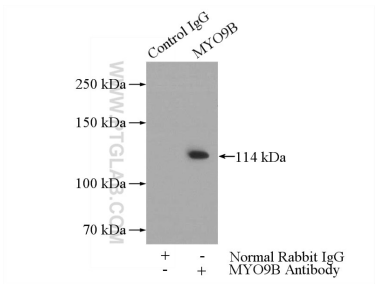
Immunohistochemical analysis of paraffin-embedded human liver cancer using 13442-2-AP (NNT antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human liver cancer using 13442-2-AP (NNT antibody) at dilution of 1:50 (under 40x lens).



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using NNT antibody (13442-2-AP) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L).



IP result of anti-NNT (IP:13442-2-AP, 4ug; Detection:13442-2-AP 1:300) with HepG2 cells lysate 2800ug.