For Research Use Only

NNT Polyclonal antibody

Catalog Number:13442-2-AP Featured Product 15 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
13442-2-AP

Concentration:
600 μg/ml

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

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

IP : HepG2 cells,

IHC : human liver cancer tissue,

IF/ICC : HeLa cells,

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 α and β 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 exsit as a homodimer(PMID:21882037).

Notable Publications

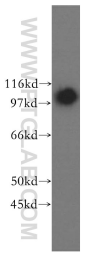
Author	Pubmed ID	Journal	Application
Miaomiao Li	34545694	Am J Med Genet A	WB
Guangjian Jiang	27832638	Cell Physiol Biochem	WB
Lei Wu	29116185	Sci Rep	WB

Storage

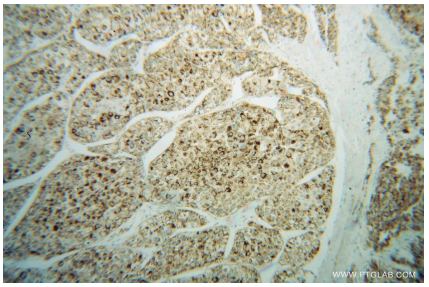
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

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

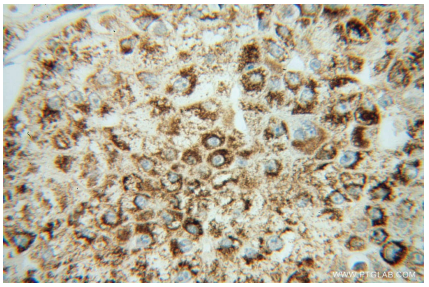
Selected Validation Data



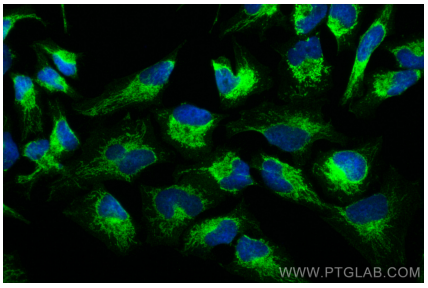
human adrenal gland tissue were subjected to SDS PAGE followed by western blot with 13442-2-AP (NNT antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



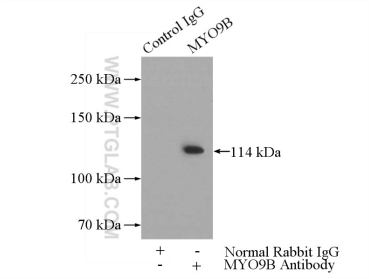
Immunohistochemical analysis of paraffin-embedded human liver cancer using 13442-2-AP (NNT antibody) at dilution of 1:50 (under 10x lens).



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.