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# NMNAT3 Antibody (Center)
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP14087C**

## Specification

### NMNAT3 Antibody (Center) - Product Information

| | |
|---|---|
| Application | **WB, IHC-P,E** |
| Primary Accession | Q96T66 |
| Other Accession | NP_835471.1 |
| Reactivity | **Human** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **28322** |
| Antigen Region | **150-178** |

### NMNAT3 Antibody (Center) - Additional Information

**Gene ID** 349565

**Other Names**
Nicotinamide mononucleotide adenylyltransferase 3, NMN adenylyltransferase 3, Nicotinate-nucleotide adenylyltransferase 3, NaMN adenylyltransferase 3, Pyridine nucleotide adenylyltransferase 3, PNAT-3, NMNAT3

**Target/Specificity**
This NMNAT3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 150-178 amino acids from the Central region of human NMNAT3.

**Dilution**
WB~~1:1000
IHC-P~~1:100

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**
NMNAT3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### NMNAT3 Antibody (Center) - Protein Information

**Name** NMNAT3 (HGNC:20989)

**Function** Catalyzes the formation of NAD(+) from nicotinamide mononucleotide (NMN) and ATP. Can also use the deamidated form; nicotinic acid mononucleotide (NaMN) as substrate with the same efficiency. Can use triazofurin monophosphate (TrMP) as substrate. Can also use GTP and ITP as nucleotide donors. Also catalyzes the reverse reaction, i.e. the pyrophosphorolytic cleavage of NAD(+). For the pyrophosphorolytic activity, can use NAD(+), NADH, NaAD, nicotinic acid adenine dinucleotide phosphate (NHD), nicotinamide guanine dinucleotide (NGD) as substrates. Fails to cleave phosphorylated dinucleotides NADP(+), NADPH and NaADP(+). Protects against axonal degeneration following injury.

**Cellular Location**
Mitochondrion

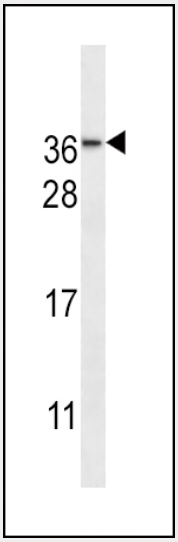
**Tissue Location**
Expressed in lung and spleen with lower levels in placenta and kidney.

## NMNAT3 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

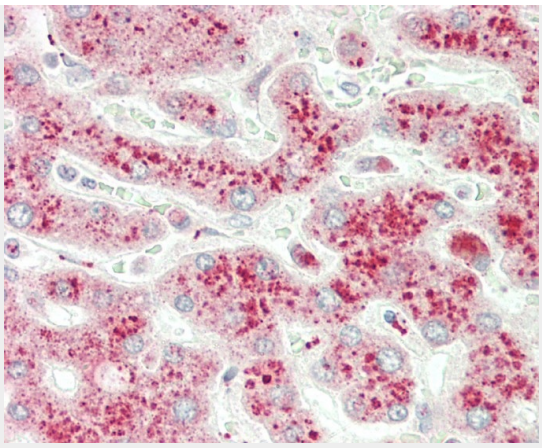
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## NMNAT3 Antibody (Center) - Images




NMNAT3 Antibody (Center) (Cat. #AP14087c) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the NMNAT3 antibody detected the NMNAT3 protein (arrow).

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Formalin-fixed and paraffin-embedded H.liver tissue reacted with NMNAT3 Antibody (Center) (Cat#AP14087c).

**NMNAT3 Antibody (Center) - Background**

The coenzyme NAD and its derivatives are involved in hundreds of metabolic redox reactions and are utilized in protein ADP-ribosylation, histone deacetylation, and in some Ca(2+) signaling pathways. NMNAT (EC 2.7.7.1) is a central enzyme in NAD biosynthesis, catalyzing the condensation of nicotinamide mononucleotide (NMN) or nicotinic acid mononucleotide (NaMN) with the AMP moiety of ATP to form NAD or NaAD (Zhang et al., 2003 [PubMed 12574164]).

**NMNAT3 Antibody (Center) - References**

Di Stefano, M., et al. Blood Cells Mol. Dis. 45(1):33-39(2010)
Lau, C., et al. J. Biol. Chem. 285(24):18868-18876(2010)
Sorci, L., et al. Biochemistry 46(16):4912-4922(2007)
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Magni, G., et al. Cell. Mol. Life Sci. 61(1):19-34(2004)