10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NARS Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11089a

Specification

NARS Antibody (N-term) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	O43776
Other Accession	Q8BP47, Q4R4Z1, Q2KJG3, NP_004530.1
Reactivity	**Human**
Predicted	**Bovine, Monkey, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**62943**
Antigen Region	**24-53**

NARS Antibody (N-term) - Additional Information

Gene ID 4677

Other Names
Asparagine--tRNA ligase, cytoplasmic, Asparaginyl-tRNA synthetase, AsnRS, NARS

Target/Specificity
This NARS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 24-53 amino acids from the N-terminal region of human NARS.

Dilution
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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
NARS Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

NARS Antibody (N-term) - Protein Information

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Name NARS1 (HGNC:7643)

Function Catalyzes the attachment of asparagine to tRNA(Asn) in a two- step reaction: asparagine is first activated by ATP to form Asn-AMP and then transferred to the acceptor end of tRNA(Asn) (PubMed:32738225, PubMed:32788587, PubMed:9421509). In addition to its essential role in protein synthesis, acts as a signaling molecule that induced migration of CCR3-expressing cells (PubMed:12235211, PubMed:30171954). Has an essential role in the development of the cerebral cortex, being required for proper proliferation of radial glial cells (PubMed:32788587).

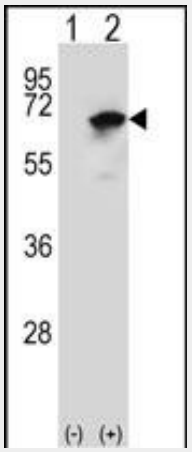
Cellular Location
Cytoplasm.

NARS Antibody (N-term) - Protocols

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

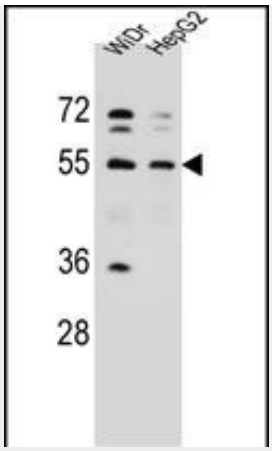
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NARS Antibody (N-term) - Images

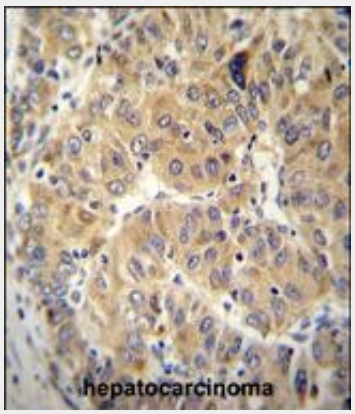


Western blot analysis of NARS (arrow) using rabbit polyclonal NARS Antibody (N-term) (Cat. #AP11089a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the NARS gene.

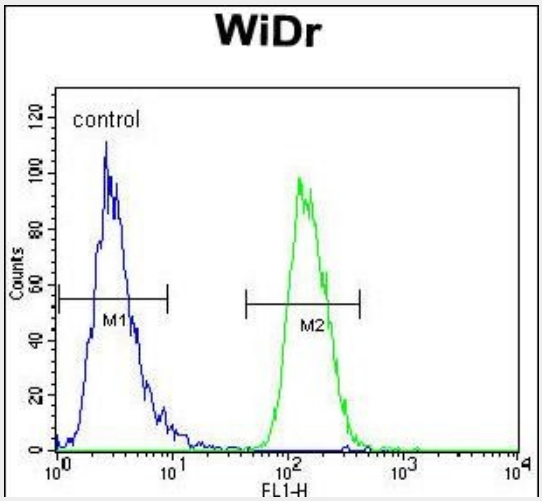
10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



NARS Antibody (N-term) (Cat. #AP11089a) western blot analysis in WiDr,HepG2 cell line lysates (35ug/lane).This demonstrates the NARS antibody detected the NARS protein (arrow).



NARS Antibody (N-term) (Cat. #AP11089a)immunohistochemistry analysis in formalin fixed and paraffin embedded human hepatocarcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of NARS Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



NARS Antibody (N-term) (Cat. #AP11089a) flow cytometric analysis of WiDr cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

NARS Antibody (N-term) - Background

Aminoacyl-tRNA synthetases are a class of enzymes that charge tRNAs with their cognate amino acids. Asparaginyl-tRNA synthetase is localized to the cytoplasm and belongs to the class II family of tRNA synthetases. The N-terminal domain represents the signature sequence for the eukaryotic asparaginyl-tRNA synthetases.

NARS Antibody (N-term) - References

Lim, J., et al. Cell 125(4):801-814(2006)
Lehner, B., et al. Genome Res. 14(7):1315-1323(2004)
Shiba, K., et al. Nucleic Acids Res. 26(22):5045-5051(1998)
Beaulande, M., et al. Nucleic Acids Res. 26(2):521-524(1998)
Cirullo, R.E., et al. Somatic Cell Genet. 9(2):215-233(1983)