

# NPM1 antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # Al10110

# **Specification**

# NPM1 antibody - N-terminal region - Product Information

Application WB, IHC Primary Accession P06748

Other Accession <u>P06748</u>, <u>NP 002511</u>, <u>NM 002520</u>

Reactivity Human, Mouse, Rat, Rabbit, Pig, Dog,

Guinea Pig, Horse, Bovine

Predicted Human, Mouse, Rabbit, Guinea Pig, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 33 kDa KDa

# NPM1 antibody - N-terminal region - Additional Information

**Gene ID 4869** 

Alias Symbol B23, NPM

**Other Names** 

Nucleophosmin, NPM, Nucleolar phosphoprotein B23, Nucleolar protein NO38, Numatrin, NPM1, NPM

# Target/Specificity

NPM1 is a member of Nucleophosmin (NPM) family. NPM is a ubiquitously expressed nucleolar phosphoprotein that continuously shuttles between the nucleus and cytoplasm

#### **Format**

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

#### **Reconstitution & Storage**

Add 100 ul of distilled water. Final anti-NPM1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at -20°C. Avoid repeat freeze-thaw cycles.

### **Precautions**

NPM1 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

# NPM1 antibody - N-terminal region - Protein Information

Name NPM1 (HGNC:7910)

Synonyms NPM

#### **Function**

Involved in diverse cellular processes such as ribosome biogenesis, centrosome duplication,



protein chaperoning, histone assembly, cell proliferation, and regulation of tumor suppressors p53/TP53 and ARF. Binds ribosome presumably to drive ribosome nuclear export. Associated with nucleolar ribonucleoprotein structures and bind single-stranded nucleic acids. Acts as a chaperonin for the core histones H3, H2B and H4. Stimulates APEX1 endonuclease activity on apurinic/apyrimidinic (AP) double-stranded DNA but inhibits APEX1 endonuclease activity on AP single-stranded RNA. May exert a control of APEX1 endonuclease activity within nucleoli devoted to repair AP on rDNA and the removal of oxidized rRNA molecules. In concert with BRCA2, regulates centrosome duplication. Regulates centriole duplication: phosphorylation by PLK2 is able to trigger centriole replication. Negatively regulates the activation of EIF2AK2/PKR and suppresses apoptosis through inhibition of EIF2AK2/PKR autophosphorylation. Antagonizes the inhibitory effect of ATF5 on cell proliferation and relieves ATF5-induced G2/M blockade (PubMed: <a href="http://www.uniprot.org/citations/22528486" target=" blank">22528486</a>). In complex with MYC enhances the transcription of MYC target genes (PubMed:<a href="http://www.uniprot.org/citations/25956029" target=" blank">25956029</a>). May act as chaperonin or cotransporter in the nucleolar localization of transcription termination factor TTF1 (By similarity).

#### **Cellular Location**

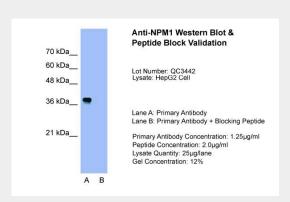
Nucleus, nucleolus. Nucleus, nucleoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome Note=Generally nucleolar, but is translocated to the nucleoplasm in case of serum starvation or treatment with anticancer drugs. Has been found in the cytoplasm in patients with primary acute myelogenous leukemia (AML), but not with secondary AML. Co-localizes with the methylated form of RPS10 in the granular component (GC) region of the nucleolus. Colocalized with nucleolin and APEX1 in nucleoli. Isoform 1 of NEK2 is required for its localization to the centrosome during mitosis. Can shuttle between cytoplasm and nucleus (PubMed:38231884)

### NPM1 antibody - N-terminal region - Protocols

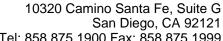
Provided below are standard protocols that you may find useful for product applications.

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

# NPM1 antibody - N-terminal region - Images



NPM1 antibody - N-terminal region (Al10110) in HepG2 cells using Western Blot Host: Rabbit





Tel: 858.875.1900 Fax: 858.875.1999

Target Name: NPM1 Sample Tissue:HepG2 Lane A:Primary Antibody

Lane B: Primary Antibody + Blocking Peptide

Primary Antibody

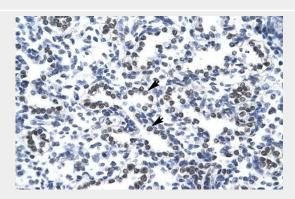
Concentration:1.25µg/ml

Peptide Concentration: 2.0µg/ml Lysate Quantity: 25ug/lane

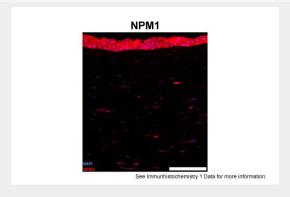
Gel

Concentration: 12%There is BioGPS gene expression data showing that NPM1 is expressed in

HepG2



NPM1 antibody - N-terminal region (Al10110) in Human Lung cells using Immunohistochemistry Human Lung



NPM1 antibody - N-terminal region (Al10110) in human cornea cells using Immunohistochemistry

Sample Type: human cornea (frozen)

Blue: DAPI Red: NPM1

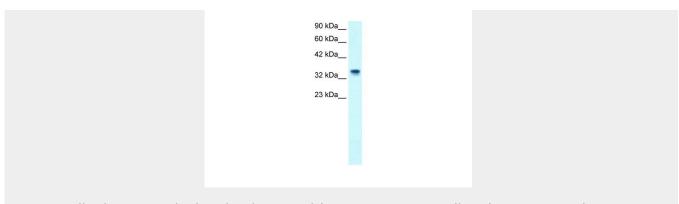
Primary Dilution: 1:100

**Image** 

Submitted by: Geraint Parfitt

Gavin Herbert Eye Institute See Customer Feedback tab for detailed information.





NPM1 antibody - N-terminal region (Al10110) in Human HepG2 cells using Western Blot WB Suggested Anti-NPM1 Antibody Titration:  $1.0\mu g/ml$ 

Positive Control: HepG2 cell lysate

There is BioGPS gene expression data showing that NPM1 is expressed in HepG2

# NPM1 antibody - N-terminal region - Background

This is a rabbit polyclonal antibody against NPM1. It was validated on Western Blot and immunohistochemistry by Abgent. At Abgent we manufacture rabbit polyclonal antibodies on a large scale (200-1000 products/month) of high throughput manner. Our antibodies are peptide based and protein family oriented. We usually provide antibodies covering each member of a whole protein family of your interest. We also use our best efforts to provide you antibodies recognize various epitopes of a target protein. For availability of antibody needed for your experiment, please inquire (sales@abgent.com).