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

NPM1 / NPM / Nucleophosmin Antibody (aa201-250)

Rabbit Polyclonal Antibody
Catalog # ALS15004

Specification

NPM1 / NPM / Nucleophosmin Antibody (aa201-250) - Product Information

Application	**IF, WB, IHC**
Primary Accession	P06748
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**33kDa KDa**

NPM1 / NPM / Nucleophosmin Antibody (aa201-250) - Additional Information

Gene ID 4869

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

Target/Specificity
NPM (Ab-234) Antibody detects endogenous levels of total NPM protein.

Reconstitution & Storage
Store at -20°C for up to one year.

Precautions
NPM1 / NPM / Nucleophosmin Antibody (aa201-250) is for research use only and not for use in diagnostic or therapeutic procedures.

NPM1 / NPM / Nucleophosmin Antibody (aa201-250) - Protein Information

Name NPM1

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:22528486). In complex with MYC enhances the transcription of MYC target genes (PubMed:25956029). 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. Can shuttle between cytoplasm and nucleus. 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

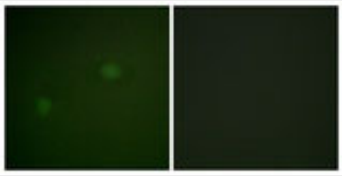
Volume
50 µl

NPM1 / NPM / Nucleophosmin Antibody (aa201-250) - Protocols

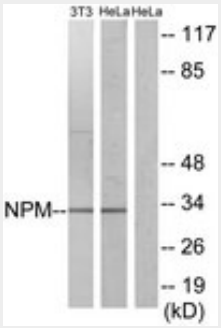
Provided below are standard protocols that you may find useful for product applications.

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

NPM1 / NPM / Nucleophosmin Antibody (aa201-250) - Images

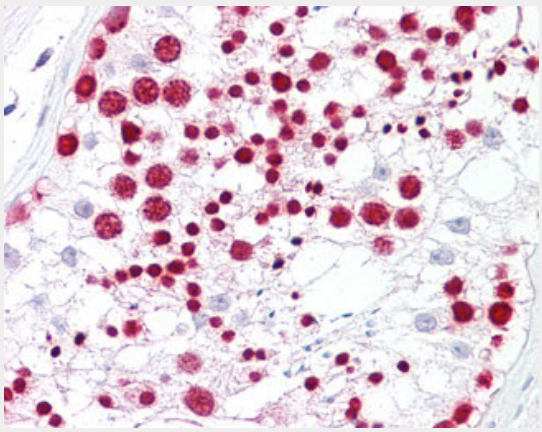


Immunofluorescence of HeLa cells, using NPM (Ab-234) Antibody.



Western blot of extracts from HeLa/NIH-3T3 cells, using NPM (Ab-234) Antibody.

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Anti-NPM1 antibody IHC of human testis.

NPM1 / NPM / Nucleophosmin Antibody (aa201-250) - Background

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NPM1 / NPM / Nucleophosmin Antibody (aa201-250) - References

Chan W.-Y.,et al.Biochemistry 28:1033-1039(1989).
Li X.,et al.Biochem. Biophys. Res. Commun. 163:72-78(1989).
Zhang X.T.,et al.Biochem. Biophys. Res. Commun. 164:176-184(1989).
Chan P.-K.,et al.Nucleic Acids Res. 25:1225-1232(1997).
Okuwaki M.,et al.Submitted (APR-2000) to the EMBL/GenBank/DDBJ databases.