

Nucleophosmin (hNPM), human recombinant protein
Nucleolar phosphoprotein B23, Nucleolar protein NO38, Numatrin, NPM, NPM1
Catalog # PBV10885r

Specification

Nucleophosmin (hNPM), human recombinant protein - Product info

Primary Accession	P06748
Concentration	2
Calculated MW	59.8 kDa (292 aa + NT GST-tag) KDa

Nucleophosmin (hNPM), human recombinant protein - Additional Info

Gene ID	4869
Gene Symbol	NPM
Other Names	
Nucleolar phosphoprotein B23, Nucleolar protein NO38, Numatrin, NPM, NPM1	
Gene Source	Human
Source	E. coli
Assay&Purity	SDS-PAGE; ≥95%
Assay2&Purity2	N/A;
Recombinant	Yes
Target/Specificity	
Nucleophosmin	

Format

Liquid

Storage

-80°C; 2.0 mg/ml solution in 25 mM Tris (pH 8.0) buffer containing 20% glycerol.

Nucleophosmin (hNPM), human recombinant protein - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Nucleophosmin (hNPM), human recombinant protein - Images

Nucleophosmin (hNPM), human recombinant protein - Background

Nucleophosmin is a nucleus protein which belongs to the nucleoplasmin family. It is a nucleolar

phosphoprotein that shuttles between the nucleus and cytoplasm during the cell cycle. Nucleophosmin / NPM1 is involved in diverse cellular processes such as ribosome biogenesis, centrosome duplication, protein chaperoning, histone assembly, cell proliferation, and regulation of tumor suppressors TP53 / p53 and ARF. Subcellular localization of Nucleophosmin / NPM1 appears to be strongly correlated with NPM1 functions and cell proliferation. It is phosphorylated mainly at its central acidic domain by several upstream kinases, and its phosphorylation appears to be involved in regulating its functions in ribosome biogenesis and centrosome duplication. Nucleophosmin / NPM1 binds ribosome presumably to drive ribosome nuclear export. It is associated with nucleolar ribonucleoprotein structures and bind single-stranded nucleic acids. Nucleophosmin / NPM1 acts as a chaperonin for the core histones H3, H2B and H4. Nucleophosmin / NPM1 may act as a licensing factor to maintain proper centrosome duplication and that the Ran/CRM1 nucleocytoplasmic complex regulates local trafficking of Nucleophosmin / NPM1 to centrosomes by interacting through its nuclear export sequence motif. The recombinant protein includes NPM (292 aa) with N-terminal GST-tag.

Nucleophosmin (hNPM), human recombinant protein - 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.