

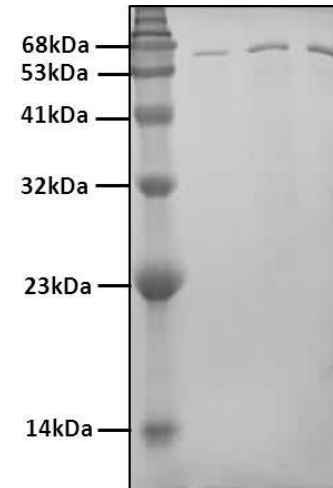
# Nucleophosmin (hNPM), human recombinant

<b>CATALOG #:</b>	7258-20	20 µg
	7258-100	100 µg
	7258-1000	1000 µg
<b>ALTERNATE NAMES:</b>	Nucleolar phosphoprotein B23, Nucleolar protein NO38, Numatrin, NPM, NPM1	
<b>SOURCE:</b>	E. coli	
<b>PURITY:</b>	≥95% by SDS-PAGE	
<b>MOL. WEIGHT:</b>	59.8 kDa (292 aa + NT GST-tag)	
<b>FORMULATION:</b>	2.0 mg/ml solution in 25 mM Tris (pH 8.0) buffer containing 20% glycerol.	
<b>STORAGE CONDITIONS:</b>	Stable for 1 year at -70°C. Avoid multiple freeze / thaw cycles as the activity may decrease.	

**DESCRIPTION:** Nucleophosmin is a nucleus protein which belongs to the nucleoplasm 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.

**APPLICATION AND USAGE:**

hNPM is useful in cancer research, screening inhibitors, selectivity profiling, western blot, ELISA etc.



Lane 1: Marker  
 Lane 2: 0.1 µg NPM  
 Lane 3: 0.2 µg NPM  
 Lane 4: 0.5 µg NPM

15% SDS-PAGE of GST-tagged hNMP

**RELATED PRODUCTS:**

- NPM Antibody (Cat. No. 3425-100)
- Histone Protein (Cat. No. 1136-10)
- Histone H2A (1-129 aa), Xenopus recombinant (Cat. No. 7668-100, -250)
- Histone H2B (1-123 aa), Xenopus recombinant (Cat. No. 7669-100, -250)
- Histone H3 (1-136 aa), Human recombinant (Cat. No. 7670-100, -250)
- Histone H4 (1-103 aa), Human recombinant (Cat. No. 7671-100, -250)

**FOR RESEARCH USE ONLY! Not to be used on humans.**

