Recombinant NPM protein (His tag)

Catalog Number	544319
Synonyms	NPM; Nucleolar phosphoprotein B23; Nucleolar protein NO38; Numatrin
Species	Human
Expression System	E. coli
Accession	P06748
Molecular Weight	Predictes a molecular mass of 14.82 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	1-120
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-120 aa (P06748) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Nucleophosmin (NPM) Fragment (1-120) is a high-purity, stable protein designed for structural and biochemical research. This fragment, derived from the multifunctional nucleolar protein NPM, offers a soluble and well-characterized unit ideal for studying protein interactions, folding, and functional mechanisms in vitro. Nucleophosmin (NPM), encoded by the NPM1 gene, is a critical nucleolar phosphoprotein involved in diverse cellular processes, including ribosome biogenesis, centrosome duplication, histone assembly, and regulation of tumor suppressors such as p53/TP53 and ARF. It functions as a chaperone for core histones H3, H2B, and H4, modulates DNA repair through interactions with APEX1, and plays roles in cell proliferation and apoptosis suppression by inhibiting EIF2AK2/PKR activation. NPM primarily localizes to the nucleolus but can shuttle to the nucleoplasm under stress conditions and is also found at the centrosome, highlighting its dynamic subcellular distribution and importance in maintaining genomic stability and cellular homeostasis.