

Product datasheet for SC118573

Nucleophosmin (NPM1) (NM_002520) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nucleophosmin (NPM1) (NM_002520) Human Untagged Clone
Tag:	Tag Free
Symbol:	Nucleophosmin
Synonyms:	B23; NPM
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_002520 edited
 GAATTCGGCAGCAGGCCGCTCCTGCGCGTTGTTCTCTGGAGCAGCGTTCTTTTATCTCCG
 TCCGCCTTCTCTCTACCTAAGTGCCTGCGCCACCCGATGGAAGATTCGATGGACATGG
 ACATGAGCCCCCTGAGGCCCCAGAACTATCTTTTCGGTTGTGAACATAAGGCCGACAAAAG
 ATTATCACTTTAAGGTGGATAATGATGAAAATGAGCACCAGTTATCTTTAAGAACGGTCA
 GTTTAGGGGCTGGTGCAAAGGATGAGTGCACATTGTTGAAGCAGAGGCAATGAATTACG
 AAGGCAGTCCAATTAAAGTAACACTGGCAACTTTGAAAATGTCTGTACAGCCAACGGTTT
 CCCTTGGGGGCTTTGAAATAACACCACCAGTGGTCTTAAGGTTGAAGTGTGGTTCAGGGC
 CAGTGCATATTAGTGGACAGCACTTAGTAGCTGTGGAGGAAGATGCAGAGTCAGAAGATG
 AAGAGGAGGAGGATGTGAAACTTTAAGTATATCTGAAAAGCGGTCTGCCCTGGAGGTG
 GTAGCAAGGTTCCACAGAAAAAAGTAAACTTGTCTGTATGAAGATGATGACGATGATG
 ATGAAGAGGATGATGATGAAGATGATGATGATGATGATGATGATGATGATGATGATGATG
 AAAAAGCGCCAGTGAAGAAATCTATACGAGATACTCCAGCCAAAAATGCACAAAAGTCAA
 ATCAGAATGGAAGAACTCAAAACCATCATCAACACCAAGATCAAAAGGACAAGAATCCT
 TCAAGAAAACAGGAAAAAATCCTAAAACACCAAAAGGACCTAGTTCTGTAGAAAGACATTA
 AAGCAAAAATGCAAGCAAGTATAGAAAAAGGTGGTTCTCTTCCAAAAGTGAAGCCAAAT
 TCATCAATTATGTGAAGAATTGCTTCCGGATGACTGACCAAGAGGCTATTCAAGATCTCT
 GGCAGTGGAGGAAGTCTCTTTAAGAAAAATGTTTAAACAATTTGTTAAAAAATTTTCCGT
 CTTATTTTCAATTTCTGTAACAGTTGATATCTGGCTGCTCTTTTATAATGCAGAGTGAGAA
 CTTTCCCTACCGTGTGATAAATGTTGTCCAGTTCTATTGCCAAGAATGTGTTGTCCA
 AAATGCCGTTTTAGTTTTTAAAGATGGAACCTCACCCCTTTGCTTGGTTTTAAGTATGTATG
 GAATGTTATGATAGGACATAGTAGTAGCGGTGGTCCAGACATGGAATGGTGGGGAGACAA
 AAATATACATGTGAAATAAACTCAGTATTTTAAAGTAAAAAAGTAAAAAAGTAAAAAAGT
 CGAC



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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002520 unedited
 GATATTTGTATACGACTTACTATAGGNNCGGCCGCGNAATTCGGCACGAGGCCGTCCTG
 CGCGGTTGTTCTCTGGAGCAGCGTTCTTTTATCTCCGTCGCCCTTCTCTCCTACCTAAGT
 GCGTGCCGCCACCCGATGGAAGATTCGATGGACATGGACATGAGCCCCCTGAGGCCCCAG
 AACTATCTTTTCGGTTGTGAACAAAGGCCGTAATTTGATTATCACTTTAAGGTGGATAA
 TGATGAAAATGAGCACCAGTTATCTTTAAGAACGGTCAGTTTAGGGCTGGTCAAAGGA
 TGAGTTGCACATTGTTGAAGCAGAGGCAATGAATTACGAAGGCAGTCCAATTAAGTAAC
 ACTGGCAACTTTGAAAATGTCTGTACAGCCAACGGTTTCCCTTGGGGGCTTTGAAATAAC
 ACCACCAGTGGTCTTAAGTTGAAGTGTGGTTCAGGGCCAGTGCATATTAGTGGACAGCA
 CTTAGTAGCTGTGGAGGAAGATGCAGAGTCAGAAGATGAAGAGGAGGAGGATGTGAAACT
 CTTAAGTATATCTGGAAAGCGGTCTGCCCTGGAGGTGGTAGCAAGGTTCCACAGAAAAA
 AGTAAAATTGCTGCTGATGAAGATGATGACGATGATGATGAAGAGGATGATGATGAAGA
 TGATGATGATGATGATTCTGATGATGAGGAAGCTGAAGACAAAGCGCCAGTGAAGAAATC
 TATACGAGATACTCCAGCAAAAATGCACAAAAGTCAAATCAGAATGGGAAAGACTCANA
 ACCATCATCACCACCCAGATCAAAGGACAAGAATCCTTCAAGAAACAGGAATAAACTTC
 TAAACACCCAAAAGCACCTAGTTCTGTAGAAGACATTTAAAGCAAAATGCAAGCAGTATAG
 AAAAAGGTGGGTCTCTCCCAAAGGGGAGCCCAATTCATCATATGTGAAGAATGCTCCC
 GTAGACTGACCANAGCTTN

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_002520 unedited
 TTTCCCCCTCCNCCCCCCCCCNCNGTTGCGTTTGCTTTGGACCGCGGCCGCATCCT
 ACGATCGAGTTTTTTTTTTTTTTTTTTTACTTTATTA AAAA ACTGAGTTTTATTCTCATG
 TATATTTTGTACTCCCCACCATTTCATGTCTGACCACCGCTACTACTATGTCCTATCA
 TAACATTCATACATACTTAAAACCAAGCAAAGGGTGGAGTTCCATCTTTAAAAACTAAA
 CGGCATTTTGGACAACACATTCTTGCAATAGAACCTGGACAACATTTATCAAACACGGT
 AGGGAAAGTTCTCACTCTGCATTATAAAAAGGACAGTCAGATATCAACTGTTACAGAAAT
 GAAATAAGACGGAAAAATTTTTAACAAATTGTTTAAACTATTTTCTTAAAGAGACTTCT
 CCACTGCCAGAGATCTTGAATAGCCTCTTGTCAGTCATCCGGAAGCAATTCTTCACATA
 ATTGATGAATTTGGCTTCCACTTTGGGAAGAGAACCACCTTTTCTATACTTGCTTGCA
 TTTTGCCTTAATGTCTTCTACAGAACTAGGTCCTTTTGGTGTGTTTAGGAGTTTTTCTCG
 TTTCTTGAAGGATCTTGTCTTTTGTCTTTTGTCTTTTGGCTTGGAGTATCCTCGATCGATTCTTCACTGG
 ATTCTGATTTGACTTTTGTGCATTTTGGCTGGAGTATCCTCGATCGATTCTTCACTGG
 CGTTTTTCTTCACTTTCTCATCATCAAAAANATCATCATCACTCTCCACATCATT
 CCTCTTACCACCATCGGCATCATTCTTCAACAGCAAAGTTTACTTCTTTTTTGGG
 GAACCTTTGCTACAACCTTCAAGGGGCAGAACCGCTTTTCCAAAAATTTTAAGGAGT
 TTCCATCCCTCCCTCCTTCTTCTGAACTGGCAATCTTCTCCACAAGATA

Restriction Sites:

NotI-NotI

ACCN:

NM_002520

Insert Size:

1310 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_002520.4](#), [NP_002511.1](#)

RefSeq Size: 1350 bp

RefSeq ORF: 885 bp

Locus ID: 4869

UniProt ID: [P06748](#)

Cytogenetics: 5q35.1

Domains: Nucleoplasmin

Protein Families: Druggable Genome, Stem cell - Pluripotency, Transcription Factors

Gene Summary: The protein encoded by this gene is involved in several cellular processes, including centrosome duplication, protein chaperoning, and cell proliferation. The encoded phosphoprotein shuttles between the nucleolus, nucleus, and cytoplasm, chaperoning ribosomal proteins and core histones from the nucleus to the cytoplasm. This protein is also known to sequester the tumor suppressor ARF in the nucleolus, protecting it from degradation until it is needed. Mutations in this gene are associated with acute myeloid leukemia. Dozens of pseudogenes of this gene have been identified. [provided by RefSeq, Aug 2017]

Transcript Variant: This variant (1) encodes the longest isoform (1). Variants 1 and 7 both encode the same isoform (1).