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Product datasheet for AM08453PU-N

Nucleophosmin (NPM1) Mouse Monoclonal Antibody [Clone ID: No-185]

Product data:

Product Type:	Primary Antibodies
Clone Name:	No-185
Applications:	IF, IHC, IP, WB
Recommended Dilution:	**Immunoprecipitation.** **Western blot:** 1/1000-1/2000 (ECL method). **Immunofluorescence Microscopy on Frozen Sections** (also after Fixation with Paraformaldehyde). **Immunohistochemistry on Frozen Sections:** 1/300-1/500. *Incubation time:* 1h at RT.
Reactivity:	Chicken, Xenopus
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Nucleolar fraction prepared from *Xenopus laevis* oocytes.
Specificity:	The antibody recognizes a 38 kD nucleolar protein(NO38) in Xenopus (this protein has also been termed B23, nucleophosmin, numatrin in other species). No-185 stains specifically the granular component of the nucleolus and small nucleolar dots in interphase cells. During mitosis the protein is localized accumulated around the condensed chromosomes. The epitope recognized is different from the one recognized by clone No-63 (Cat#BM5524).
Formulation:	State: Supernatant State: Hybridoma Culture Supernatant (Concentrate) containing 0.09% Sodium Azide.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2-8°C.
Stability:	Shelf life: one year from despatch.
Gene Name:	nucleophosmin (nucleolar phosphoprotein B23, numatrin)
Database Link:	P06748

View online »

Background:

Nucleophosmin (NPM) also called B23, nutramin and NO38 is a ubiquitously expressed phosphoprotein involved in ribosome assembly/transport, cytoplasmic/nuclear trafficking, regulation of DNA polymerase alpha activity, centrosome duplication, and regulation of p53. It is involved in the acute response of mammalian cells to environmental stress, such as UV rays. NPM continuously shuttles between the nucleus and cytoplasm. It has been shown to bind nucleic acid, prevent protein aggregation via its chaperone activities, protect enzymes during thermal denaturation, and facilitate renaturation of chemically denatured proteins. In its cellular structure role, there is evidence suggesting NPM is associated with the centrosome. It is the substrate of CDK2/cyclin E during duplication of centrosomes (cellular division).
Because of NPM gene interaction with several tumor-associated chromosome translocations, NPM is thought to be a portion of several fusion proteins: NPM-ALK, NPM-RAR, and NPM-MLF1. While it is not thought to be part of the transforming potential of these fusion proteins, it is believed to act as the interface for oligomerization and oncogenic conversion of these tumor promoting fusion proteins.

Synonyms:

NPM, NPM1, Numatrin