

36-2867: Anti-Nucleophosmin (Acute Myeloid Leukemia Marker) Monoclonal Antibody(Clone: NPM1/3285)

Clonality :	Monoclonal
Clone Name :	NPM1/3285
Application :	IF,ELISA,IHC
Reactivity :	Human
Gene :	NPM1
Gene ID :	4869
Uniprot ID :	P06748
Alternative Name :	NO38; NPM; NPM1; Nucleolar phosphoprotein B23; Nucleolar protein NO38; Nucleophosmin (nucleolar phosphoprotein B23 numatrin); Nucleophosmin; Nucleophosmin/nucleoplasmin family member 1; Numatrin
Isotype :	Mouse IgG2c, kappa
Immunogen Information :	Recombinant human NPM1 protein fragment (aa185-287) (exact sequence is proprietary)

Description

Recognizes a 33kDa glycoprotein, identified as Nucleophosmin (NPM). It is predominantly localized in the nucleus of cells in most tissues. NPM is involved in ribosomal assembly and rRNA transport. It is an abundant protein that is highly phosphorylated by Cdc2 kinase during mitosis. This phosphoprotein moves between the nucleus and the cytoplasm. It is thought to be involved in several processes including regulation of the ARF/p53 pathway. A number of genes are fusion partners, in particular the anaplastic lymphoma kinase gene on chromosome 2. Mutations in exon 12 affecting the C-terminus of the protein are associated with an aberrant cytoplasmic location. Mutations in this gene are associated with acute myeloid leukemia. The antibody may be a useful aid for classification of acute myeloid leukemia.

Product Info

Amount :	20 µg / 100 µg
Content :	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage condition :	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

Application Note

Immunofluorescence (1-2ug/ml); ELISA (Use Ab at 2-4ug/ml for coating) (Order Ab without BSA); Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 min at RT) (Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes);

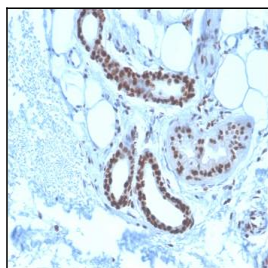


Fig. 1: Formalin-fixed, paraffin-embedded human Basal Cell Carcinoma stained with Nucleophosmin-Monospecific Mouse Monoclonal Antibody (NPM1/3285).

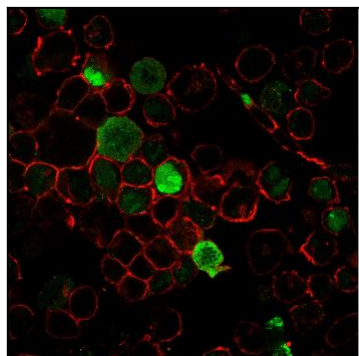


Fig. 2: Immunofluorescence staining of K562 cells using Nucleophosmin-Monospecific Mouse Monoclonal Antibody (NPM1/3285) followed by goat anti-Mouse IgG conjugated to CF488 (green). Nuclei are stained with Reddot.

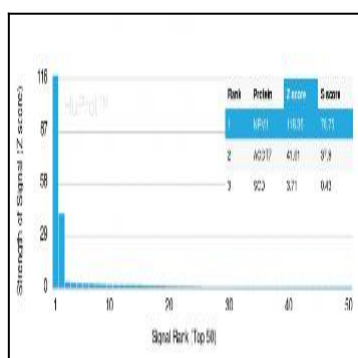


Fig. 3: Analysis of Protein Array containing more than 19,000 full-length human proteins using Nucleophosmin-Monospecific Mouse Monoclonal Antibody (NPM1/3285) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a Monoclonal Antibody to its intended target. A Monoclonal Antibody is considered to be specific to its intended target, if the Monoclonal Antibody has an S-score of at least 2.5. For example, if a Monoclonal Antibody binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that Monoclonal Antibody to protein X is equal to 29.