

Mouse Anti-Nucleophosmin/NPM1 [NA24]: MC0148, MC0148RTU7

Intended Use: For Research Use Only

Description: Recognizes a 33kDa glycoprotein, identified as Nucleophosmin (NPM1). It is predominantly localized in the nucleus of cells in most tissues. NPM1 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.

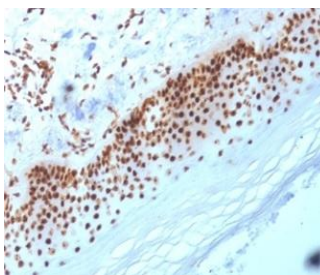
Specifications

Clone: NA24
 Source: Mouse
 Isotype: IgG1k
 Reactivity: Human
 Immunogen: GST fusion protein containing the N-terminal of nucleophosmin fused to 14 aa of ALK protein
 Localization: Nucleus, cytoplasm
 Formulation: Protein A/G purified antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN3)
 Storage: Store at 2°- 8°C
 Applications: IHC, Flow Cyt., IF, WB
 Package:

Description	Catalog No.	Size
Nucleophosmin/NPM1 Concentrated	MC0148	1 ml
Nucleophosmin/NPM1 Prediluted	MC0148RTU7	7 ml

IHC Procedure*

Positive Control Tissue: Skin, colon, HeLa cells
 Concentrated Dilution: 50-200
 Pretreatment: Tris EDTA pH9.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.



FFPE human skin stained with anti-NPM1 using DAB

References:

- 14-3-3? Prevents Centrosome Amplification and Neoplastic Progression. Mukhopadhyay A, et al. Sci Rep 6:26580, 2016.
- Ki-67 is a PP1-interacting protein that organises the mitotic chromosome periphery. Booth DG, et al. Elife 3:e01641,2014.
- The novel chemical entity YTR107 inhibits recruitment of nucleophosmin to sites of DNA damage, suppressing repair of DNA double-strand breaks and enhancing radiosensitization. Sekhar KR, et al. Clin Cancer Res 17:6490-9, 2011.