# Recombinant NPM1 Monoclonal Antibody

**catalog number:** **AN301612L**

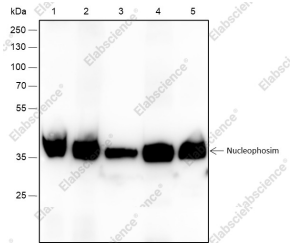
**Note:** *Centrifuge before opening to ensure complete recovery of vial contents.*

## Description

| | |
|---|---|
| **Reactivity** | Human;Mouse;Rat |
| **Immunogen** | Recombinant human NPM1 fragment |
| **Host** | Rabbit |
| **Isotype** | Rabbit IgG |
| **Clone** | C111235 |
| **Purification** | Protein A purified |
| **Buffer** | PBS, 50% glycerol, 0.05% Proclin 300, 0.05% protein protectant. |

| Applications | Recommended Dilution |
|---|---|
| **WB** | 1:500-1:2000 |
| **IHC** | 1:200-1:1000 |
| **IF** | 1:100-1:500 |
| **FCM** | 1:50-1:100 |

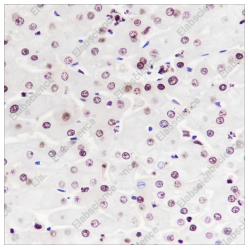
## Data



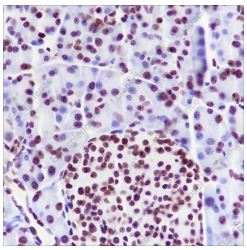

Western Blot with NPM1 Monoclonal Antibody at dilution of 1:2000. Lane 1: HeLa, Lane 2: Jurkat, Lane 3: MCF-7, Lane 4: NIH/3T3, Lane 5: PC-12

**Observed-MW:37 kDa**

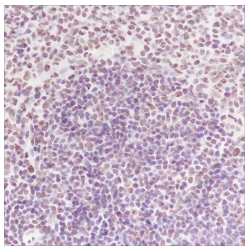
**Calculated-MW:33 kDa**



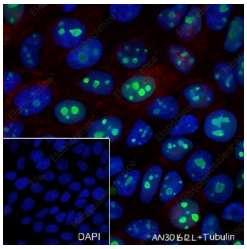
Immunohistochemistry of paraffin-embedded Human liver using NPM1 Monoclonal Antibody at dilution of 1:1000.

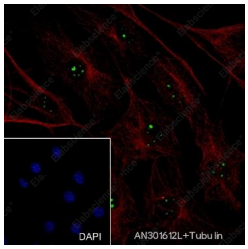


Immunohistochemistry of paraffin-embedded Mouse pancreas using NPM1 Monoclonal Antibody at dilution of 1:1000.



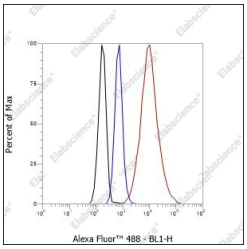
Immunohistochemistry of paraffin-embedded Rat spleen using NPM1 Monoclonal Antibody at dilution of 1:1000.



Immunofluorescent analysis of (4% Paraformaldehyde) fixed MCF-7 cells using anti-NPM1 Monoclonal Antibody at dilution of 1:500.

Immunofluorescent analysis of (4% Paraformaldehyde) fixed NIH/3T3 cells using anti-NPM1 Monoclonal Antibody at dilution of 1:500.




Flow cytometric analysis of human NPM1 expression on Hela cells. Cells were stained with purified anti-Human NPM1, then a Alexa Fluor 488-conjugated second step antibody. The histogram were derived from events with the forward and side light-scatter characteristics of intact cells.

## Preparation & Storage

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|---|---|
| **Storage** | Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles. |
| **Shipping** | Ice bag |

## Background

Involved in diverse cellular processes such as ribosome biogenesis, centrosome duplication, protein chaperoning, histone assembly, cell proliferation, and regulation of tumor suppressors p53/TP53 and ARF. Binds ribosome presumably to drive ribosome nuclear export. Associated with nucleolar ribonucleoprotein structures and bind single-stranded nucleic acids. Acts as a chaperonin for the core histones H3, H2B and H4. Stimulates APEX1 endonuclease activity on apurinic/apyrimidinic (AP) double-stranded DNA but inhibits APEX1 endonuclease activity on AP single-stranded RNA. May exert a control of APEX1 endonuclease activity within nucleoli devoted to repair AP on rDNA and the removal of oxidized rRNA molecules. In concert with BRCA2, regulates centrosome duplication. Regulates centriole duplication: phosphorylation by PLK2 is able to trigger centriole replication. Negatively regulates the activation of EIF2AK2/PKR and suppresses apoptosis through inhibition of EIF2AK2/PKR autophosphorylation. Antagonizes the inhibitory effect of ATF5 on cell proliferation and relieves ATF5-induced G2/M blockade. In complex with MYC enhances the transcription of MYC target genes.