

NPM1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant NPM1. Catalog # AT3085a

Specification

NPM1 Antibody (monoclonal) (M01) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW IF, WB, IHC, E <u>P06748</u> <u>BC002398</u> Human mouse Monoclonal IgG1 kappa 32575

NPM1 Antibody (monoclonal) (M01) - Additional Information

Gene ID 4869

Other Names Nucleophosmin, NPM, Nucleolar phosphoprotein B23, Nucleolar protein NO38, Numatrin, NPM1, NPM

Target/Specificity NPM1 (AAH02398.1, 1 a.a. ~ 294 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution WB~~1:500~1000

Format Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions NPM1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

NPM1 Antibody (monoclonal) (M01) - Protocols

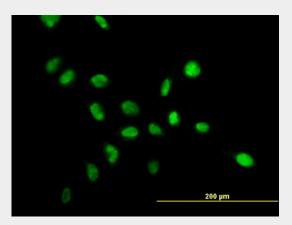
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot

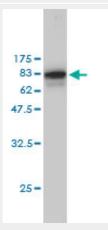


- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

NPM1 Antibody (monoclonal) (M01) - Images



Immunofluorescence of monoclonal antibody to NPM1 on HeLa cell. [antibody concentration 10 ug/ml]



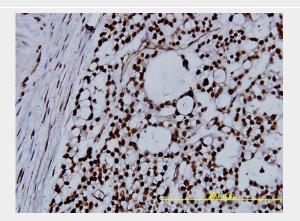
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (58.08 KDa).

250 = 150 100 = 75 =	
50 -	
37 -	•••
25-	
20-	
15-	
10-	

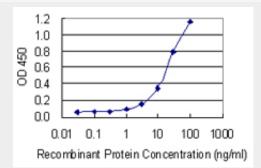
NPM1 monoclonal antibody (M01), clone 3B2 Western Blot analysis of NPM1 expression in Hela S3



NE ((Cat # AT3085a)



Immunoperoxidase of monoclonal antibody to NPM1 on formalin-fixed paraffin-embedded human ovary, clear cell carcinoma tissue. [antibody concentration 5 ug/ml]



Detection limit for recombinant GST tagged NPM1 is 0.3 ng/ml as a capture antibody.

NPM1 Antibody (monoclonal) (M01) - Background

This gene encodes a phosphoprotein which moves between the nucleus and the cytoplasm. The gene product is thought to be involved in several processes including regulation of the ARF/p53 pathway. A number of genes are fusion partners have been characterized, in particular the anaplastic lymphoma kinase gene on chromosome 2. Mutations in this gene are associated with acute myeloid leukemia. More than a dozen pseudogenes of this gene have been identified. Alternative splicing results in multiple transcript variants.

NPM1 Antibody (monoclonal) (M01) - References

Incidence and significance of FLT3-ITD and NPM1 mutations in patients with normal karyotype acute myeloid leukaemia. Haslam K, et al. Ir J Med Sci, 2010 Aug 31. PMID 20803351.Combined mutations of ASXL1, CBL, FLT3, IDH1, IDH2, JAK2, KRAS, NPM1, NRAS, RUNX1, TET2 and WT1 genes in myelodysplastic syndromes and acute myeloid leukemias. Rocquain J, et al. BMC Cancer, 2010 Aug 2. PMID 20678218.The prognostic significance of IDH1 mutations in younger adult patients with acute myeloid leukemia is dependent on FLT3/ITD status. Green CL, et al. Blood, 2010 Jul 22. PMID 20651067.Performance and clinical evaluation of a sensitive multiplex assay for the rapid detection of common NPM1 mutations. Hafez M, et al. J Mol Diagn, 2010 Sep. PMID 20616361.High frequency type I/II mutational shifts between diagnosis and relapse are associated with outcome in pediatric AML: implications for personalized medicine. Bachas C, et al. Blood, 2010 Jun 30. PMID 20592250.