



# NPM (phospho-Ser4) rabbit pAb

<b>Catalog No</b>	YP-Ab-01460
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB
<b>Gene Name</b>	NPM1 NPM
<b>Protein Name</b>	NPM (Ser4)
<b>Immunogen</b>	Synthesized phosho peptide around human NPM (Ser4)
<b>Specificity</b>	This antibody detects endogenous levels of Human NPM (phospho-Ser4)
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.
<b>Dilution</b>	WB 1:1000-2000
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	Nucleophosmin (NPM) (Nucleolar phosphoprotein B23) (Nucleolar protein NO38) (Numatrin)
<b>Observed Band</b>	37kD
<b>Cell Pathway</b>	Nucleus, nucleolus . Nucleus, nucleoplasm . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Generally nucleolar, but is translocated to the nucleoplasm in case of serum starvation or treatment with anticancer drugs. Has been found in the cytoplasm in patients with primary acute myelogenous leukemia (AML), but not with secondary AML. Can shuttle between cytoplasm and nucleus. Co- localizes with the methylated form of RPS10 in the granular component (GC) region of the nucleolus. Colocalized with nucleolin and APEX1 in nucleoli. Isoform 1 of NEK2 is required for its localization to the centrosome during mitosis.
<b>Tissue Specificity</b>	Amnion,B-cell lymphoma,Bone marrow,Brain,Cervix carcinoma,Colon carcinoma,Epithelium,Kidney
<b>Function</b>	disease:A chromosomal aberration involving NPM1 is a cause of myelodysplastic syndrome (MDS). Translocation t(3;5)(q25.1;q34) with MLF1.,disease:A chromosomal aberration involving NPM1 is found in a form of acute promyelocytic leukemia. Translocation t(5;17)(q32;q11) with RARA.,disease:A chromosomal aberration involving NPM1 is found in a form of non-Hodgkin lymphoma. Translocation t(2;5)(p23;q35) with ALK. The resulting chimeric NPM1-ALK protein homodimerize and the kinase becomes constitutively activated.,disease:Defects in NPM1 are associated with acute myelogenous leukemia (AML). Mutations in



exon 12 affecting the C-terminus of the protein are associated with an aberrant cytoplasmic location.,function:Involved in diverse cellular processes such as ribosome biogenesis, centrosome duplication, protein chaperoning, histone assembly, cell proliferation, and regulation of tumor suppressor

#### 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.[provided by RefSeq, Nov 2009],

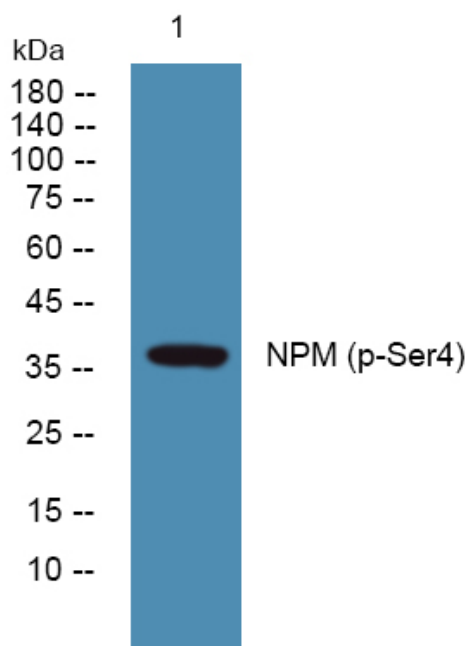
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



Western blot analysis of lysates from KB cells, primary antibody was diluted at 1:1000, 4° over night