Best Tools for immunology Research

NPM Polyclonal Antibody

Catalog No :	YT3181
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	Nucleophosmin
Gene Name :	NPM1
Protein Name :	Nucleophosmin
Human Gene Id :	4869
Human Swiss Prot No :	P06748
Mouse Gene Id :	18148
Mouse Swiss Prot No :	Q61937
Rat Gene Id :	25498
Rat Swiss Prot No :	P13084
Immunogen :	The antiserum was produced against synthesized peptide derived from human NPM. AA range:201-250
Specificity :	NPM Polyclonal Antibody detects endogenous levels of NPM protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 33kD

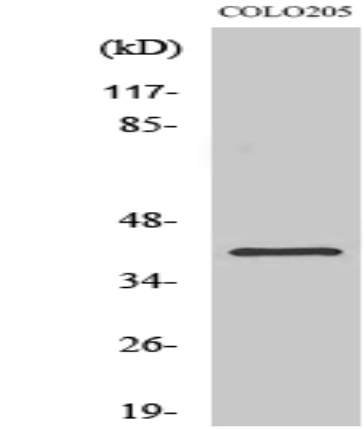
Background : This gene encodes a phosphoprotein which moves between the nucleus and the cytoplasm. The gene product is thought to be involved in several processes including regulation of the ARF/p53 pathway. A number of genes are fusion partners have been characterized, in particular the anaplastic lymphoma 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],

Function : 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

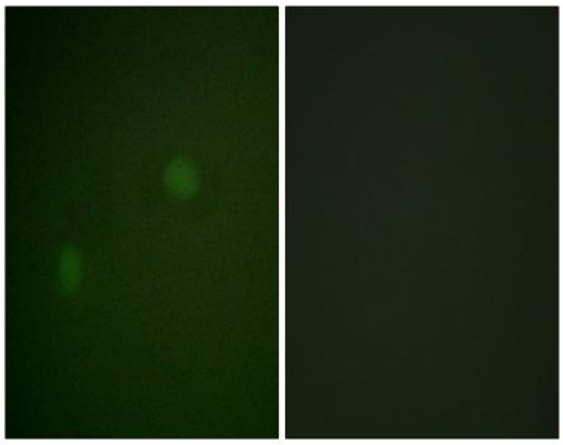
Subcellular Location : Nucleus, nucleolus . Nucleus, nucleoplasm . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Generally nucleolar, but is translocated to the nucleoplasm in case of serum starvation or treatment with anticancer drugs. Has been found in the cytoplasm in patients 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.

Expression : Amnion,B-cell lymphoma,Bone marrow,Brain,Cervix carcinoma,Colon carcinoma,Epithelium,Kidney

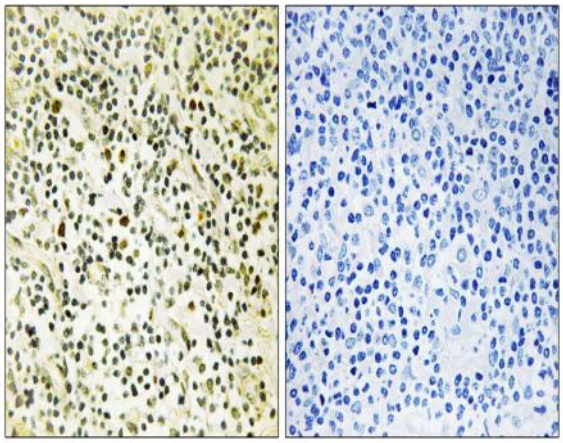
Products Images



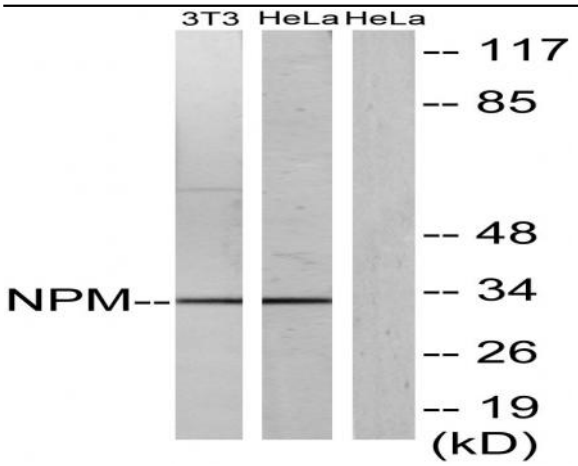
Western Blot analysis of various cells using NPM Polyclonal Antibody



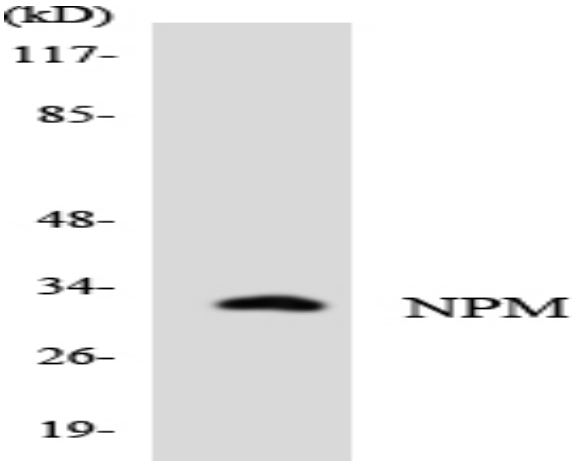
Immunofluorescence analysis of HeLa cells, using NPM Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human tonsil tissue, using NPM Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HeLa and NIH/3T3 cells, using NPM Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HT-29 cells using NPM antibody.