

## B23 (phospho Thr234) Polyclonal Antibody

Catalog No: YP0386

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: Nucleophosmin

Gene Name: NPM1

Protein Name: Nucleophosmin

P06748

Q61937

Human Gene Id: 4869

**Human Swiss Prot** 

No:

Mouse Gene Id: 18148

**Mouse Swiss Prot** 

No:

Rat Gene ld: 25498

Rat Swiss Prot No: P13084

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

NPM around the phosphorylation site of Thr234. AA range:201-250

**Specificity:** Phospho-B23 (T234) Polyclonal Antibody detects endogenous levels of B23

protein only when phosphorylated at T234.

**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. ELISA: 1:10000.. IF 1:50-200

**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: 38kD

**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

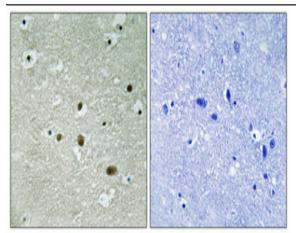
Subcellular Location : Nucleus, nucleolus . Nucleus, nucleoplasm . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Generally nucleolar, but is translocated to the nucleoplasm in case of serum starvation or treatment with anticancer drugs. Has been found in the cytoplasm in patients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

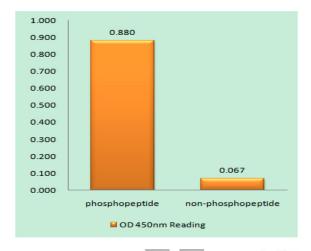
**Expression:** Amnion,B-cell lymphoma,Bone marrow,Brain,Cervix carcinoma,Colon

carcinoma, Epithelium, Kidney

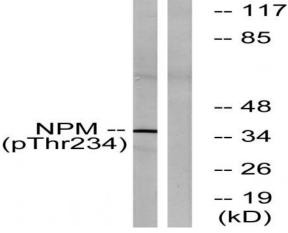
## **Products Images**



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using NPM (Phospho-Thr234) Antibody



Western blot analysis of lysates from HeLa cells treated with nocodazole 1ug/ml 18h, using NPM (Phospho-Thr234) Antibody. The lane on the right is blocked with the phospho peptide.