

B23 (phospho Thr199) Polyclonal Antibody

Catalog No: YP0902

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 Thr199. AA range:171-220

Specificity: Phospho-B23 (T199) Polyclonal Antibody detects endogenous levels of B23

protein only when phosphorylated at T199.

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: 1:40000. Not

yet tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

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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: 32kD

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 20091,

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)(g32:g11) 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

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

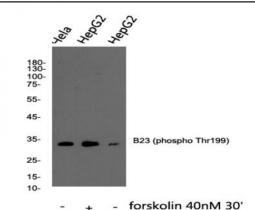
APEX1 in nucleoli. Isoform 1 of NEK2 is required for its localization to the

centrosome during mitosis.

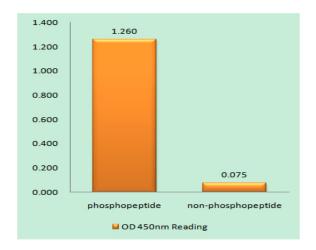
Expression : Amnion,B-cell lymphoma,Bone marrow,Brain,Cervix carcinoma,Colon

carcinoma, Epithelium, Kidney

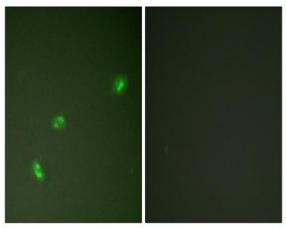
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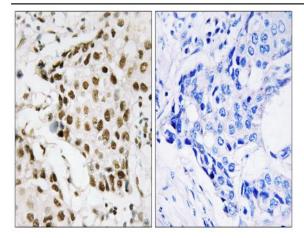
Western blot analysis of B23 (phospho Thr199) Polyclonal Antibody, using Hela, HepG2 cell treated or untreated with forskolin 40nM 30', 4° over night, secondary antibody(cat: RS0002 was diluted at 1:10000, 37° 1hour.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using NPM (Phospho-Thr199) Antibody



Immunofluorescence analysis of HeLa cells treated with EGF 200nM 5', using NPM (Phospho-Thr199) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using NPM (Phospho-Thr199) Antibody. The picture on the right is blocked with the phospho peptide.