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Rabbit Anti-Phospho-NPM (Thr199) antibody

SL3310R

Product Name:	Phospho-NPM (Thr199)
Chinese Name:	磷酸化核仁磷酸蛋白抗体
Alias:	Nucleophosmin (phospho T199); Nucleophosmin (phospho Thr199); p-Nucleophosmin (Thr199); B23; B23; MGC104254; Nucleophosmin (phospho T199);NMP1; NMP1; NO38; NPM 1; NPM; NPM_HUMAN; NPM1; Nucleolar Phosphoprotein B23; Nucleolar Phosphoprotein B23; Nucleolar protein NO38; Nucleophosmin (nucleolar phosphoprotein B23 numatrin); Nucleophosmin; Nucleophosmin/B23.2; Nucleophosmin/nucleoplasmin family member 1; Nucleoplasmin Family Member 1; Nucleoplasmin Family Member 1; Numatrin; Numatrin; OTTHUMP00000161024; OTTHUMP00000161025; OTTHUMP00000223397; OTTHUMP00000223398; TRK fused gene.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	38kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human NPM around the phosphorylation site of Thr199:RD(p-T)PA
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of

	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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:** Involved in diverse cellular processes such as ribosome biogenesis, centrosome duplication, protein chaperoning, histone assembly, cell proliferation, and regulation of tumor suppressors p53/TP53 and ARF. Binds ribosome presumably to drive ribosome nuclear export. Associated with nucleolar ribonucleoprotein structures and bind single-stranded nucleic acids. Acts as a chaperonin for the core histones H3, H2B and H4. Stimulates APEX1 endonuclease activity on apurinic/apyrimidinic (AP) double-stranded DNA but inhibits APEX1 endonuclease activity on AP single-stranded RNA. May exert a control of APEX1 endonuclease activity within nucleoli devoted to repair AP on rDNA and the removal of oxidized rRNA molecules. **Subunit:** Nucleus, nucleolus. Nucleus, nucleoplasm. Note=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. **Post-translational modifications:** Acetylated at C-terminal lysine residues, thereby increasing affinity to histones. ADP-ribosylated. Phosphorylated at Ser-4 by PLK1. Phosphorylated by CDK2 at Ser-125 and Thr-199. Phosphorylation at Thr-199 may trigger initiation of centrosome duplication. Phosphorylated by CDK1 at Thr-199, Thr-219, Thr-234 and Thr-237 during cell mitosis. When these four sites are phosphorated, RNA-binding activity seem to be abolished. May be phosphorylated at Ser-70 by NEK2. Sumoylated by ARF. **DISEASE:** Note=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. Note=A chromosomal aberration involving NPM1 is found in a form of acute promyelocytic leukemia. Translocation t(5;17)(q32;q11) with RARA. Note=A chromosomal aberration involving NPM1 is a cause of myelodysplastic

syndrome (MDS). Translocation t(3;5)(q25.1;q34) with MLF1.
Note=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.

Similarity:
Belongs to the nucleoplasmin family.

SWISS:
P06748

Gene ID:
4869

Database links:

Entrez Gene: 4869Human

Entrez Gene: 18148Mouse

Entrez Gene: 25498Rat

Omim: 164040Human

SwissProt: P06748Human

SwissProt: Q61937Mouse

SwissProt: P13084Rat

Unigene: 557550Human

Unigene: 485384Mouse

Unigene: 54537Rat

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

????核仁磷酸蛋白(nucleophosmin)是雌激素调控的一种核仁蛋白,
Nucleophosmin(又称为NPM、B23、Numatrin、NO38)位于核仁的颗粒区,与其他一些核蛋白如C23、P120等可相互作用。
????NPM可以在The nucleus与cytoplasmic之间穿梭,其定位受细胞周期及一些细胞毒药物的影响。NPM基因在多种人类Tumour中过表达,因此被公认为TumourMaker和癌基因.后来研究发现NPM也具有抑制Tumour的功能,它的缺失、突变甚至重排与多种Tumour的发生密切相关.