ARG63739
anti-NPM1 / Nucleophosmin antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes NPM1 / Nucleophosmin
Tested Reactivity	Hu, Ms
Predict Reactivity	Cow, Rat, Dog
Tested Application	ICC/IF, IHC-P, WB
Specificity	This antibody is expected to recognise both report isoforms (NP_002511.1; NP_954654.1).
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	NPM1 / Nucleophosmin
Species	Human
Immunogen	C-QEAIQDLWQWRKSL
Conjugation	Un-conjugated
Alternate Names	NPM; Nucleolar protein NO38; B23; Nucleophosmin; Numatrin; Nucleolar phosphoprotein B23

Application Instructions

Application table

Application	Dilution
ICC/IF	10 µg/ml
IHC-P	5 µg/ml
WB	0.01 - 1 µg/ml

Application Note

WB: Recommend incubate at RT for 1h.
IHC-P: Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0).
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

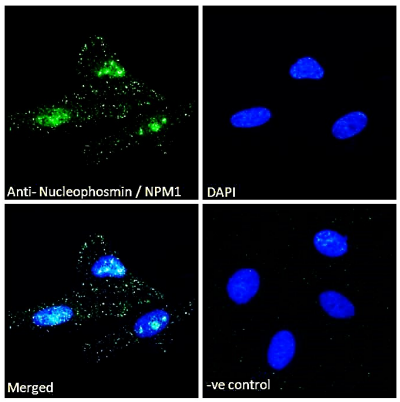
Form	Liquid
Purification	Purified from goat serum by antigen affinity chromatography.
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA
Concentration	0.5 mg/ml

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

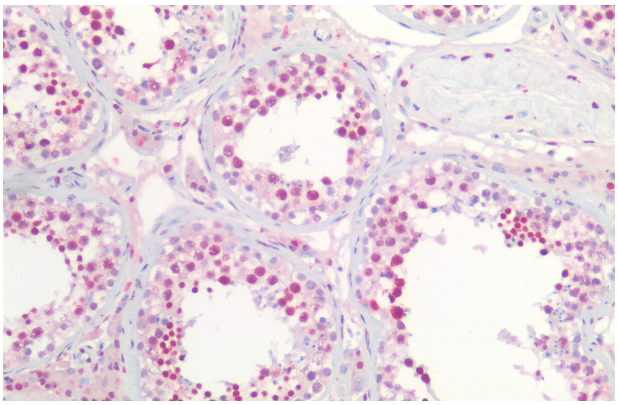
Database links	GeneID: 18148 Mouse GeneID: 4869 Human Swiss-port # P06748 Human Swiss-port # Q61937 Mouse
Background	This gene encodes a phosphoprotein which moves between the nucleus and the cytoplasm. The gene product is thought to be involved in several processes including regulation of the ARF/p53 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]
Research Area	Nucleolar Marker antibody; GC Marker antibody; Granular Component Marker antibody
Calculated Mw	33 kDa
PTM	Acetylated at C-terminal lysine residues, thereby increasing affinity to histones. ADP-ribosylated. Phosphorylated at Ser-4 by PLK1 and PLK2. Phosphorylation at Ser-4 by PLK2 in S phase is required for centriole duplication and is sufficient to trigger centriole replication. Phosphorylation at Ser-4 by PLK1 takes place during mitosis. 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. The Thr-199 phosphorylated form has higher affinity for ROCK2. CDK6 triggers Thr-199 phosphorylation when complexed to Kaposi's sarcoma herpesvirus (KSHV) V-cyclin, leading to viral reactivation by reducing viral LANA levels. Sumoylated by ARF. May be ubiquitinated. Ubiquitination leads to proteasomal degradation.

Images



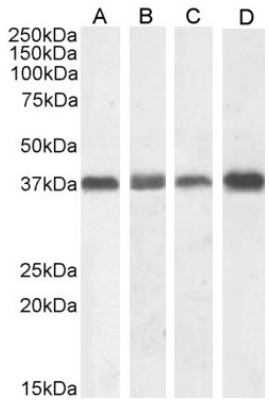
ARG63739 anti-NPM1 / Nucleophosmin antibody ICC/IF image

Immunofluorescence: Paraformaldehyde fixed HeLa cells permeabilized with 0.15% Triton. Cells were stained with ARG63739 anti-NPM1 / Nucleophosmin antibody (green) at 10 µg/ml dilution for 1 hour. DAPI (blue) for nuclear staining. Negative control: Unimmunized goat IgG (green) at 10 µg/ml dilution.



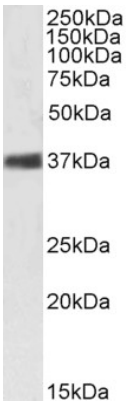
ARG63739 anti-NPM1 / Nucleophosmin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human testis tissue. Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). The tissue section was stained with ARG63739 anti-NPM1 / Nucleophosmin antibody at 5 µg/ml dilution followed by AP-staining.



ARG63739 anti-NPM1 / Nucleophosmin antibody WB image

Western blot: 35 µg of NIH/3T3 (A), Daudi (B), Jurkat (C) and K562 (D) cell lysates (in RIPA buffer) stained with ARG63739 anti-NPM1 / Nucleophosmin antibody at 1 µg/ml (A), 0.1 µg/ml (B, C) and 0.01 µg/ml (D) dilutions and incubated at RT for 1 hour.



ARG63739 anti-NPM1 / Nucleophosmin antibody WB image

Western blot: 35 µg of Mouse spleen lysate (in RIPA buffer) stained with ARG63739 anti-NPM1 / Nucleophosmin antibody at 1 µg/ml dilution and incubated at RT for 1 hour.