

## Human Nucleophosmin (NPM1) type A mutation polyclonal antibody

<b>Category</b>	polyclonal antibody
<b>Catalog No.</b>	B-N-001
<b>Applications</b>	WB
<b>Reactivity</b>	Human

### Immunogen information

<b>Immunogen</b>	A peptide corresponding to the C-terminal sequence of human NPM1 (mut-A)
<b>UniProt ID</b>	P06748
<b>Synonyms</b>	B23, NP38, Numatrin
<b>Gene ID</b>	4869

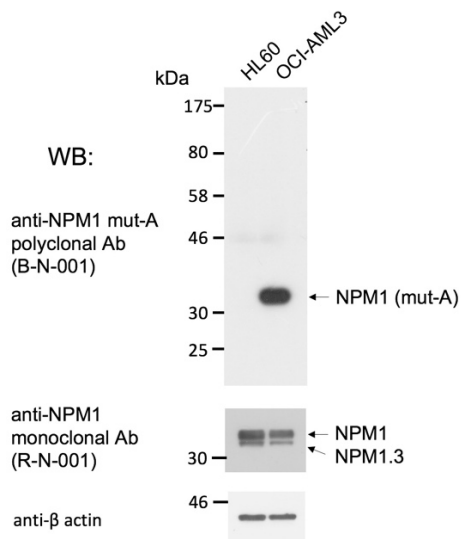
### Product information

<b>Source</b>	Rabbit
<b>Isotype</b>	IgG
<b>Purification method</b>	Affinity purification
<b>Lot No.</b>	001
<b>Concentration</b>	0.4 mg/mL
<b>Buffer</b>	50% glycerol/PBS, pH7.4, w/o sodium azide
<b>Storage</b>	Store at -20°C.

### Recommended dilutions

<b>WB</b>	1:1000 – 1:2000
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### Western blot



### Detection of Endogenous NPM1 (mut-A) in OCI-AML3 Human leukemia Cell Line by Western Blot.

Endogenous NPM1(mut-A) in OCI-AML3 acute myeloid leukemia cells was detected by Western blotting with rabbit anti-human NPM1 mut-A polyclonal antibody (Catalog # B-N-001, upper panel).

## Background

Nucleophosmin was originally identified as a highly phosphorylated protein in the nucleolus. NPM1 also localizes to the nucleoplasm, and shuttles between the nucleus and the cytoplasm. NPM1 is involved in various biological processes such as ribosome biogenesis, centrosome duplication, genome instability and apoptosis. The overexpression of NPM1 has been observed in many types of solid tumors, including gastric, prostate, liver and colon. Translocation in the NPM1 gene has been reported for several hematopoietic malignancies; for example, t(2;5)(p23;q35) in 75% of anaplastic lymphoma kinase-positive anaplastic large cell lymphoma. Furthermore, approximately one-third of acute myeloid leukemia (AML) patients harbor frameshift mutations in exon 12 of the NPM1 gene, resulting in the generation of a nuclear export signal in the C-terminal region of NPM1 and localization of the mutant NPM1 to the cytoplasm. NPM1 type A mutation (NPM1 mut-A; TCTG insertion at the 960th nucleotide in exon 12) may be a good molecular marker for assessing the clinical status and predicting the outcomes in AML patients.

## References for NPM1 polyclonal antibody (B-N-001)

PMID:	29507312	Journal:	Scientific Reports
Application:	WB	IF (2017):	4.122
Title:	Analysis of the oligomeric states of nucleophosmin using size exclusion chromatography.		