

Anti-Nucleophosmin (2D9) Mouse Monoclonal Antibody

Introduction

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. In concert with BRCA2, regulates centrosome duplication. Regulates centriole duplication: phosphorylation by PLK2 is able to trigger centriole replication. Negatively regulates the activation of EIF2AK2/PKR and suppresses apoptosis through inhibition of EIF2AK2/PKR autophosphorylation. Antagonizes the inhibitory effect of ATF5 on cell proliferation and relieves ATF5-induced G2/M blockade (PubMed:22528486). In complex with MYC enhances the transcription of MYC target genes (PubMed:25956029).

Product parameters

Alternative Names	B23; NPM
Gene ID	4869
Gene Name	NPM1
SwissProt ID	P06748
Host	Mouse
Reactivity	Human, Mouse
Molecular Weight	Calculated MW: 33 kDa; Observed MW: 38 kDa
Conjugation	Unconjugated
Ex	-
Em	-
Modification	Unmodified
Clonality	IgG1
Isotype	Monoclonal Antibody
Clonality No.	AP-8G11E10
Form	Liquid
Concentration	See label

Carrier	Carrier Not Free
Immunogen	Purified recombinant full length of human NPM1 protein expressed in E.coli.
Purification	Affinity Purified
Buffer System	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Application	WB, ChIP
Dilution Ratio	WB: 1/500-1/1000 ChIP: 1/20
Research Field	Epigenetics and Nuclear Signaling
Product Categories	Primary antibody
Shipping	Blue ice
Storage	-20°C
Expiration Date	12 months
Note	Please avoid freeze-thaw cycles.

Protocol

Configure the product according to the application range and recommended dilution ratio.

***Note:** The primary antibody dilution buffer options: WB - Primary Antibody Dilution Buffer (Cat. #: K1200, Not for HRP/AP conjugated antibodies), Immunostaining - Immunol Staining Primary Antibody Dilution Solution (Cat. #: K4655).

Note

1. This product is for scientific research use only.



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