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NM23 (NME1) Antibody (N-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8080a

Specification

NM23 (NME1) Antibody (N-term) - Product Information

Application	**IF, WB, IHC-P,E**
Primary Accession	P15531
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**25-54**

NM23 (NME1) Antibody (N-term) - Additional Information

Gene ID 4830

Other Names
Nucleoside diphosphate kinase A, NDK A, NDP kinase A, Granzyme A-activated DNase, GAAD, Metastasis inhibition factor nm23, NM23-H1, Tumor metastatic process-associated protein, NME1, NDPKA, NM23

Target/Specificity
This NM23 (NME1) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 25-54 amino acids from the N-terminal region of human NM23 (NME1).

Dilution
IF~~1:10~50
WB~~1:1000
IHC-P~~1:50~100

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
NM23 (NME1) Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

NM23 (NME1) Antibody (N-term) - Protein Information

Name NME1

Synonyms NDPKA, NM23

Function Major role in the synthesis of nucleoside triphosphates other than ATP. The ATP gamma phosphate is transferred to the NDP beta phosphate via a ping-pong mechanism, using a phosphorylated active-site intermediate. Possesses nucleoside-diphosphate kinase, serine/threonine-specific protein kinase, geranyl and farnesyl pyrophosphate kinase, histidine protein kinase and 3'-5' exonuclease activities. Involved in cell proliferation, differentiation and development, signal transduction, G protein-coupled receptor endocytosis, and gene expression. Required for neural development including neural patterning and cell fate determination. During GZMA- mediated cell death, works in concert with TREX1. NME1 nicks one strand of DNA and TREX1 removes bases from the free 3' end to enhance DNA damage and prevent DNA end reannealing and rapid repair.

Cellular Location
Cytoplasm. Nucleus. Note=Cell-cycle dependent nuclear localization which can be induced by interaction with Epstein-barr viral proteins or by degradation of the SET complex by GzmA

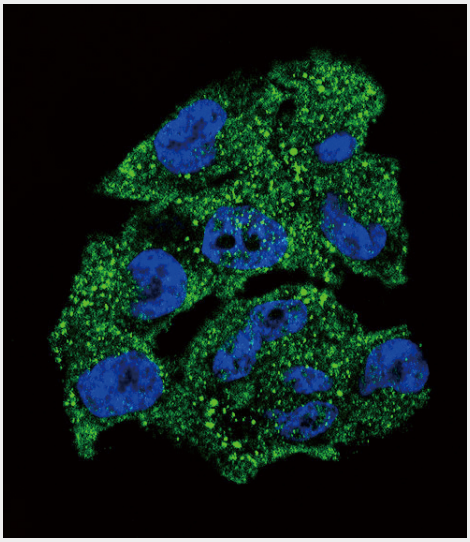
Tissue Location
Isoform 1 is expressed in heart, brain, placenta, lung, liver, skeletal muscle, pancreas, spleen and thymus. Expressed in lung carcinoma cell lines but not in normal lung tissues. Isoform 2 is ubiquitously expressed and its expression is also related to tumor differentiation.

NM23 (NME1) Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

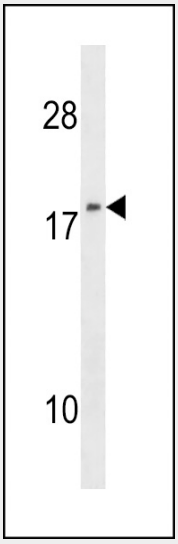
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

NM23 (NME1) Antibody (N-term) - Images

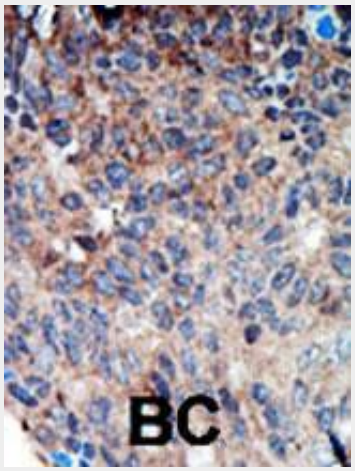


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Confocal immunofluorescent analysis of NM23 (NME1) Antibody (N-term)(Cat#AP8080a) with A375 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green).DAPI was used to stain the cell nuclear (blue).



NME1 Antibody (F40) (Cat. #AP8080a) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the NME1 antibody detected the NME1 protein (arrow).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

NM23 (NME1) Antibody (N-term) - Background

NME1 was identified because of its reduced mRNA transcript levels in highly metastatic cells. NME1 encodes the 'A' isoform of nucleoside diphosphate kinase (NDK). NDK exists as a hexamer composed of the 'A' (NME1) and 'B' (encoded by NME2) isoforms. Mutations in NME1 have been identified in aggressive neuroblastomas.

NM23 (NME1) Antibody (N-term) - References

Munier, A., et al., Exp. Cell Res. 289(2):295-306 (2003).
Chen, Y., et al., J. Mol. Biol. 332(4):915-926 (2003).
Kim, Y.I., et al., Biochem. Biophys. Res. Commun. 307(2):281-289 (2003).
Wang, P.H., et al., Gynecol. Obstet. Invest. 55(1):14-19 (2003).

Ni, X., et al., J. Hum. Genet. 48(2):96-100 (2003).

NM23 (NME1) Antibody (N-term) - Citations

- Nm23-H1 homologs suppress tumor cell motility and anchorage independent growth.