

NME1 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1404a

Specification

NME1 Antibody - Product Information

Application	WB, IHC, IF, FC
Primary Accession	P15531
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	17kDa KDa

Description

non-metastatic cells 1,protein,with a nm23 nucleoside diphosphate kinase gene family,involved in the phosphorylation of nucleoside diphosphates,with a reduced expression in tumor progression to the metastatic phenotype,mutated in aggressive neuroblastoma,expressed in lung carcinoma cell lines not in normal lung,pyrimidine biosynthetic pathway. 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. Has tumor metastasis-suppressive capacity.Tissue specificity: 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. Isoform 3 is ubiquitously expressed.

Immunogen

Purified recombinant fragment of human NME1 expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

NME1 Antibody - Additional Information

Gene ID 4830

Other Names

Nucleoside diphosphate kinase A, NDK A, NDP kinase A, 2.7.4.6, Granzyme A-activated DNase, GAAD, Metastasis inhibition factor nm23, NM23-H1, Tumor metastatic process-associated protein, NME1, NDPKA, NM23

Dilution

WB~~1/500 - 1/2000
IHC~~1/200 - 1/1000
IF~~1/200 - 1/1000
FC~~1/200 - 1/400

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small

aliquots to prevent freeze-thaw cycles.

Precautions

NME1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

NME1 Antibody - 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

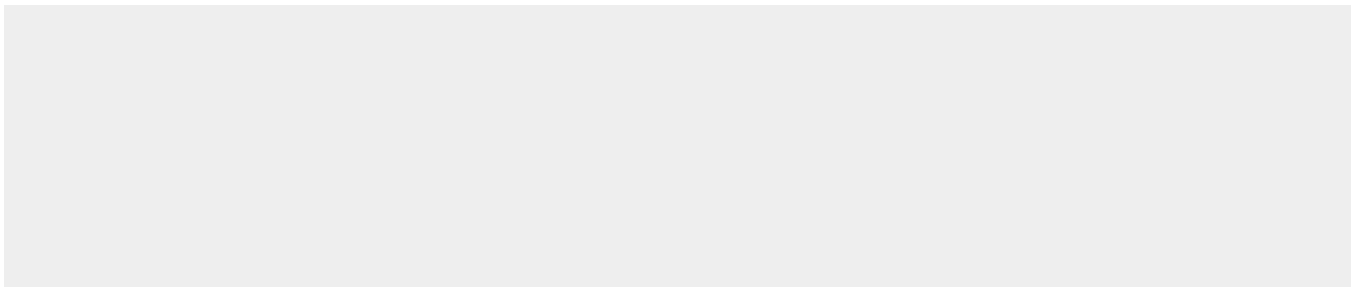
Isoform 1 is expressed in heart, brain, placenta, lung, liver, skeletal muscle, pancreas, spleen and thymus. Expressed in lung carcinoma cell lines but not in normal lung tissues. Isoform 2 is ubiquitously expressed and its expression is also related to tumor differentiation.

NME1 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

NME1 Antibody - Images



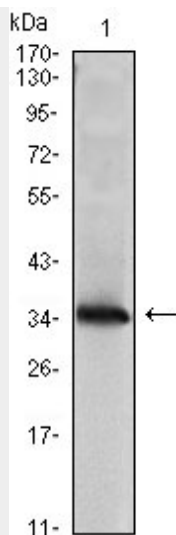


Figure 1: Western blot analysis using NME1 mAb against NME1(AA: 27-177)-hlgGFc transfected HEK293 cell lysate.

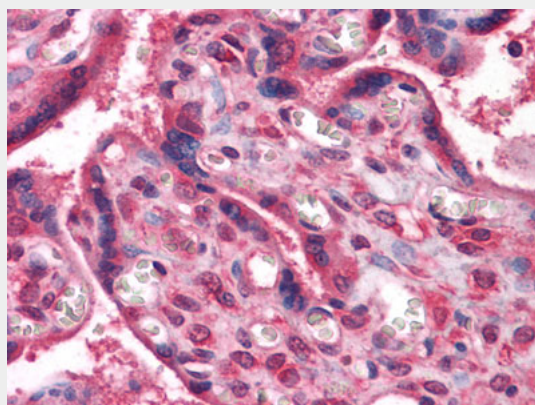


Figure 2: Immunohistochemical analysis of paraffin-embedded human Placenta tissues using anti-NME1 mouse mAb

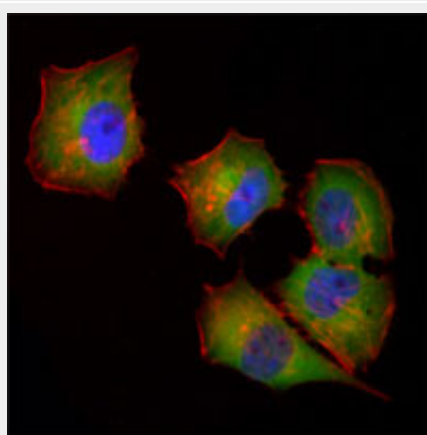


Figure 3: Immunofluorescence analysis of HeLa cells using NME1 mouse mAb (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin. Blue: DRAQ5 fluorescent DNA dye.

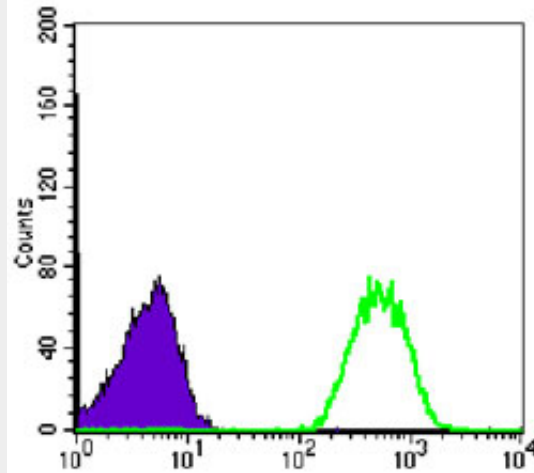


Figure 4: Flow cytometric analysis of Jurkat cells using NME1 mouse mAb (green) and negative control (purple).

NME1 Antibody - References

1. J Cell Biochem. 2009 Mar 1;106(4):666-72. 2. FEBS Lett. 2009 Sep 3;583(17):2789-92. 3. PLoS One. 2009 Nov 23;4(11):e7949.