

# NME1 Antibody

Mouse Monoclonal Antibody (Mab) Catalog # AM2209b

#### **Product Information**

**Application** WB, IHC-P, E **Primary Accession** P15531

**Reactivity** Human, Mouse, Rat

HostMouseClonalityMonoclonalIsotypeIgG2a

**Clone Names** 1172CT2.4.1.1

Calculated MW 17149

## **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 Purified His-tagged NME1 protein was used to produced this monoclonal

antibody.

**Dilution** WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.

**Format** Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein G column, followed by dialysis

against PBS.

**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** NME1 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

## **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.

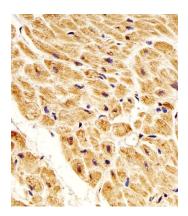
## **Background**

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### References

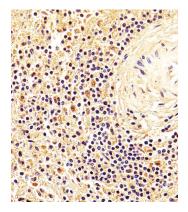
Rosengard A.M., et al. Nature 342:177-180(1989). Gilles A.-M., et al. J. Biol. Chem. 266:8784-8789(1991). Wang L., et al. Cancer Res. 53:717-720(1993). Dooley S., et al. Hum. Genet. 93:63-66(1994). Ni X., et al. J. Hum. Genet. 48:96-100(2003).

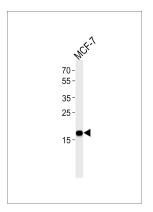
## **Images**



Immunohistochemical analysis of paraffin-embedded H. heart section using NME1 Antibody(Cat#AM2209B). AM2209B was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

Immunohistochemical analysis of paraffin-embedded H. spleen section using NME1 Antibody(Cat#AM2209B). AM2209B was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.





NME1 Antibody(Cat. #AM2209b) western blot analysis in MCF-7 cell line lysates (35 $\mu$ g/lane).This demonstrates the NME1 antibody detected the NME1 protein (arrow).

# **Citations**

• Purine metabolism gene deregulation in Parkinson\'s disease.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.