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NME1 Antibody
Mouse Monoclonal Antibody (Mab)
Catalog # AW5193

Specification

NME1 Antibody - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P15531
Reactivity	**Human, Rat**
Predicted	**Mouse**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**H=17;M=17;Rat=17 KDa**
Isotype	**IgG2a**
Antigen Source	**Human**

NME1 Antibody - Additional Information

Gene ID 4830

Antigen Region
1-132

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

Dilution
WB~~1:1000
IHC-P~~1:25

Target/Specificity
Purified His-tagged NME1 protein was used to produced this monoclonal antibody.

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.

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 Cytomety
- Cell Culture

NME1 Antibody - Images

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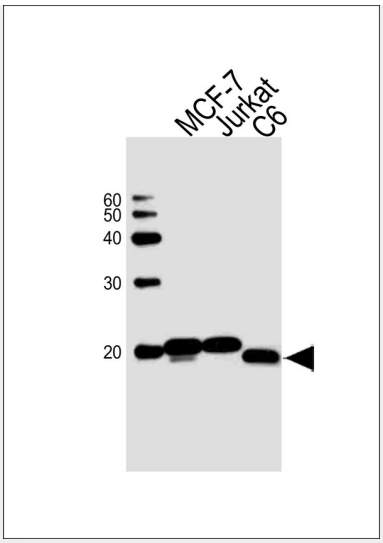
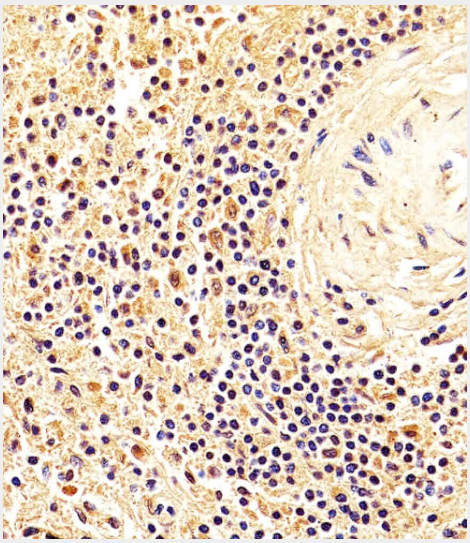


Western blot analysis of lysates from MCF-7,Jurkat,rat C6 cell line (from left to right), using NME1 Antibody(Cat. #AW5193). AW5193 was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.Lysates at 20ug per lane.



Immunohistochemical analysis of paraffin-embedded H. spleen section using NME1 Antibody(Cat#AW5193). AW5193 was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

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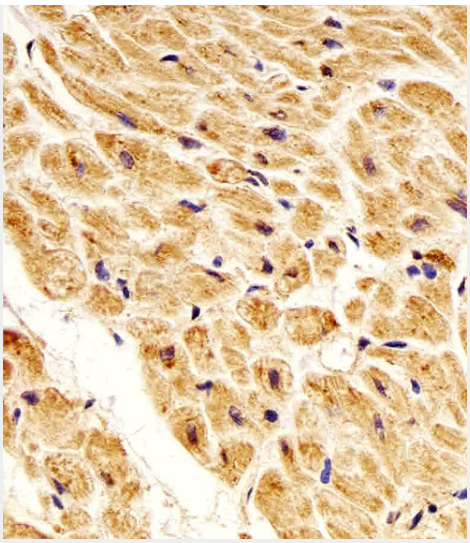

Immunohistochemical analysis of paraffin-embedded H. heart section using NME1 Antibody(Cat#AW5193). AW5193 was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

NME1 Antibody - Background

Major role in the synthesis of nucleoside triphosphates other than ATP. 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.

NME1 Antibody - References

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