

NME1 Antibody (clone 4B2)
Mouse Monoclonal Antibody
Catalog # ALS13210**Specification**

NME1 Antibody (clone 4B2) - Product Information

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

NME1 Antibody (clone 4B2) - 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

Target/Specificity

Human NME1

Reconstitution & Storage

Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions

NME1 Antibody (clone 4B2) is for research use only and not for use in diagnostic or therapeutic procedures.

NME1 Antibody (clone 4B2) - 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

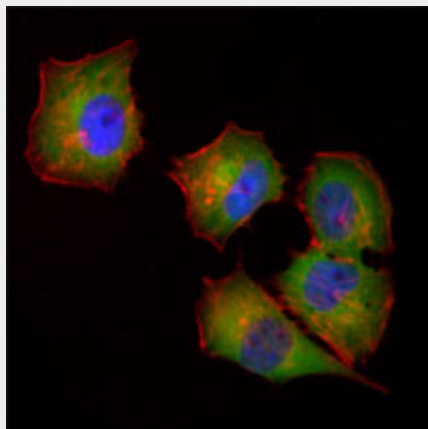
Tissue Location

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.

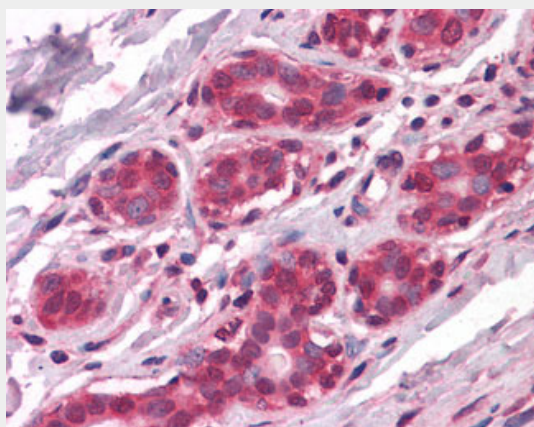
NME1 Antibody (clone 4B2) - Protocols

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

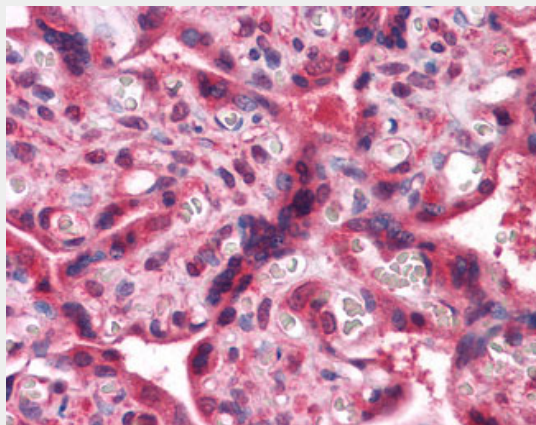
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

NME1 Antibody (clone 4B2) - Images

Immunofluorescence of HeLa cells using NME1 mouse monoclonal antibody (green).



Anti-NME1 antibody IHC of human breast.



Anti-NME1 antibody IHC of human placenta.

NME1 Antibody (clone 4B2) - Background

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.

NME1 Antibody (clone 4B2) - 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).