

NME1 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16000c

Specification

NME1 Antibody (Center) - Product Information

| | |
|-------------------|---|
| Application | WB,E |
| Primary Accession | P15531 |
| Other Accession | NP_937818.1 , NP_000260.1 |
| Reactivity | Human |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |
| Calculated MW | 17149 |
| Antigen Region | 29-57 |

NME1 Antibody (Center) - 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 NME1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 29-57 amino acids from the Central region of human NME1.

Dilution

WB~~1:1000

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

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

NME1 Antibody (Center) - 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 (Center) - 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 (Center) - Images



NME1 Antibody (Center) (Cat. #AP16000c) western blot analysis in A549 cell line and human placenta lysates (35ug/lane). This demonstrates the NME1 antibody detected the NME1 protein (arrow).

NME1 Antibody (Center) - Background

This gene (NME1) was identified because of its reduced mRNA transcript levels in highly metastatic cells. Nucleoside diphosphate kinase (NDK) exists as a hexamer composed of 'A' (encoded by this gene) and 'B' (encoded by NME2) isoforms. Mutations in this gene have been identified in aggressive neuroblastomas. Two transcript variants encoding different isoforms have been found for this gene. Co-transcription of this gene and the neighboring downstream gene (NME2) generates naturally-occurring transcripts (NME1-NME2), which encodes a fusion protein comprised of sequence sharing identity with each individual gene product.

NME1 Antibody (Center) - References

Boissan, M., et al. Cancer Res. 70(19):7710-7722(2010)
Wang, P.H., et al. Gynecol. Oncol. 119(1):70-75(2010)
Conery, A.R., et al. Proc. Natl. Acad. Sci. U.S.A. 107(35):15461-15466(2010)
Wang, Z., et al. Med. Sci. Monit. 16 (8), CR357-CR364 (2010) :
Li, Y., et al. Cancer Res. 70(14):5695-5705(2010)