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NM23 (NME1) Antibody (N-term) Blocking peptide

Synthetic peptide
Catalog # BP8080a

Specification

NM23 (NME1) Antibody (N-term) Blocking peptide - Product Information

Primary Accession P15531

NM23 (NME1) Antibody (N-term) Blocking peptide - 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
The synthetic peptide sequence is selected from aa 40~54 of human NME1.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

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

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

NM23 (NME1) Antibody (N-term) Blocking peptide - 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.

NM23 (NME1) Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

NM23 (NME1) Antibody (N-term) Blocking peptide - Images

NM23 (NME1) Antibody (N-term) Blocking peptide - Background

NME1 was identified because of its reduced mRNA transcript levels in highly metastatic cells. NME1 encodes the 'A' isoform of nucleoside diphosphate kinase (NDK). NDK exists as a hexamer composed of the 'A' (NME1) and 'B' (encoded by NME2) isoforms. Mutations in NME1 have been identified in aggressive neuroblastomas.

NM23 (NME1) Antibody (N-term) Blocking peptide - References

Munier, A., et al., Exp. Cell Res. 289(2):295-306 (2003).Chen, Y., et al., J. Mol. Biol. 332(4):915-926 (2003).Kim, Y.I., et al., Biochem. Biophys. Res. Commun. 307(2):281-289 (2003).Wang, P.H., et al., Gynecol. Obstet. Invest. 55(1):14-19 (2003).Ni, X., et al., J. Hum. Genet. 48(2):96-100 (2003).