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NME2 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP8081a

Specification

NME2 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession P22392

NME2 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 4831;654364

Other Names
Nucleoside diphosphate kinase B, NDK B, NDP kinase B, C-myc purine-binding transcription factor PUF, Histidine protein kinase NDKB, nm23-H2, NME2, NM23B

Target/Specificity
The synthetic peptide sequence is selected from aa 40~54 of human NME2.

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.

NME2 Antibody (N-term) Blocking Peptide - Protein Information

Name NME2

Synonyms NM23B

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 (By similarity). Negatively regulates Rho activity by interacting with AKAP13/LBC (PubMed:15249197). Acts as a transcriptional activator of the MYC gene; binds DNA non-specifically (PubMed:8392752, PubMed:19435876). Binds to both single-stranded guanine- and cytosine-rich strands within the nuclease hypersensitive element (NHE) III(1) region of the MYC gene promoter. Does not bind to duplex NHE III(1) (PubMed:19435876). Has G-quadruplex (G4) DNA-binding activity, which is independent of its nucleotide-binding and kinase activity. Binds both folded and unfolded G4 with

similar low nanomolar affinities. Stabilizes folded G4s regardless of whether they are prefolded or not (PubMed:25679041). Exhibits histidine protein kinase activity (PubMed:20946858).

Cellular Location
Cytoplasm. Cell projection, lamellipodium. Cell projection, ruffle. Note=Colocalizes with ITGB1 and ITGB1BP1 at the edge or peripheral ruffles and lamellipodia during the early stages of cell spreading on fibronectin or collagen but not on vitronectin or laminin substrates [Isoform 3]: Cytoplasm. Cytoplasm, perinuclear region. Nucleus

Tissue Location
[Isoform 1]: Ubiquitously expressed.

NME2 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

NME2 Antibody (N-term) Blocking Peptide - Images

NME2 Antibody (N-term) Blocking Peptide - Background

NM23 is a heterodimeric protein functioning as a nucleoside diphosphate (NDP) kinase. NME1 and NME2 comprise the 152 amino acid A and B polypeptide chains of the NM23 enzyme, respectively. NME2 is identical to the beta subunit of human erythrocyte NDP kinase. NDP kinases are involved in the synthesis of nucleoside triphosphates, and NM23 may act in the regulation of signal transduction by complexing with G proteins, causing activation/inactivation of developmental pathways. NEM2 has been identified as a putative tumor suppressor. High expression of mouse NME2 is detected in heart, liver, and kidney, with moderate expression in skeletal muscle, and negligible expression in other mouse tissues examined.

NME2 Antibody (N-term) Blocking Peptide - References

Munier, A., et al., Exp. Cell Res. 289(2):295-306 (2003).Kim, S.H., et al., Biochem. Biophys. Res. Commun. 296(4):970-975 (2002).Okabe-Kado, J., et al., Leuk. Res. 26(6):569-576 (2002).Godfried, M.B., et al., Oncogene 21(13):2097-2101 (2002).Postel, E.H., et al., Biochemistry 41(20):6330-6337 (2002).