Product Name: **NM23-H2 Rabbit Polyclonal Antibody**
Catalog #: **APRab14752**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:5000-1:10000
Molecular Weight	23kDa

Antigen Information

Gene Name	NME2
Alternative Names	NME2; NM23B; Nucleoside diphosphate kinase B; NDK B; NDP kinase B; C-myc purine-binding transcription factor PUF; Histidine protein kinase NDKB; nm23-H2
Gene ID	4831/654364
SwissProt ID	P22392
Immunogen	The antiserum was produced against synthesized peptide derived from human NM23. AA range:91-140

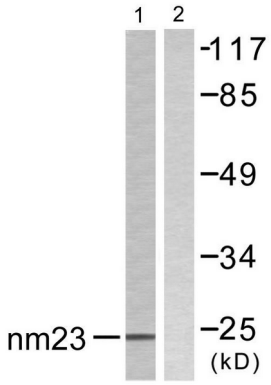
Background

Nucleoside diphosphate kinase (NDK) exists as a hexamer composed of 'A' (encoded by NME1) and 'B' (encoded by this gene) isoforms. Multiple alternatively spliced transcript variants have been found for this gene. Read-through transcription from the neighboring upstream gene (NME1) generates naturally-occurring transcripts (NME1-NME2) that encode a fusion protein comprised of sequence sharing identity with each individual gene product. [provided by RefSeq, Nov 2010],catalytic activity:ATP + nucleoside diphosphate = ADP + nucleoside triphosphate.,cofactor:Magnesium.,disease:This protein is found in reduced amount in tumor cells of high metastatic potential.,disease:This protein is found in reduced amount in tumor cells of high metastatic potential. Somatic mutations of NME1 are found in neuroblastoma. Increased NME1 in neuroblastoma is correlated with features of the disease that are associated with aggressive tumors. May therefore have distinct if not opposite roles in different tumors.,enzyme regulation:Autophosphorylation at His-118 increases serine/threonine protein kinase activity of the enzyme. Interaction with the SET complex inhibits exonuclease activity.,function:Major role in the synthesis of nucleoside triphosphates other than ATP. Negatively regulates Rho activity by interacting with AKAP13/LBC. Acts as a transcriptional activator of the c-Myc gene; binds DNA non-specifically (PubMed:8392752).,function: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. Has tumor metastasis-suppressive capacity.,PTM:The N-terminus is blocked.,similarity:Belongs to the NDK family.,subcellular location: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.,subcellular location:Isoform 2 is mainly cytoplasmic and isoform 1 and isoform 2 are excluded from the nucleolus.,subunit:Hexamer of two different chains: A and B (A6, A5B, A4B2, A3B3, A2B4, AB5, B6). Interacts with CAPN8 (By similarity). Interacts with AKAP13.,subunit:Hexamer of two different chains: A and B (A6, A5B, A4B2, A3B3, A2B4, AB5, B6). Interacts with SET and PRUNE.,tissue specificity: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. Isoform 3 is ubiquitously expressed.,tissue specificity:Ubiquitously expressed.,

Research Area

Purine metabolism;Pyrimidine metabolism;

Image Data



Western blot analysis of lysates from K562 cells, using NM23 Antibody. The lane on the right is blocked with the synthesized peptide.