

## Summary

Production Name	NM23-H1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC,IF,ELISA
Reactivity	Human, Mouse, Rat

#### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

### Immunogen

Gene Name	NME1	
Alternative Names	NME1; NDPKA; NM23; Nucleoside diphosphate kinase A; NDK A; NDP kinase A;	
	Granzyme A-activated DNase; GAAD; Metastasis inhibition factor nm23; Tumor	
	metastatic process-associated protein; nm23-H1	
Gene ID	4830.0	
SwissProt ID	P15531.The antiserum was produced against synthesized peptide derived from human	
	NM23-H1. AA range:3-52	

# Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000 IF 1:50-200
Molecular Weight	23kD



### Background

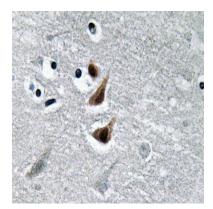
This gene (NME1) was identified because of its reduced mRNA transcript levels in highly metastatic cells. Nucleoside diphosphate kinase (NDK) exists as a hexamer composed of 'A' (encoded by this gene) and 'B' (encoded by NME2) isoforms. Mutations in this gene have been identified in aggressive neuroblastomas. 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. [provided by RefSeq, Jul 2008], 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 nucleosidediphosphate 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**

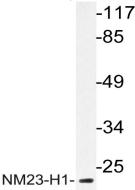
Purine metabolism;Pyrimidine metabolism;

## Image Data

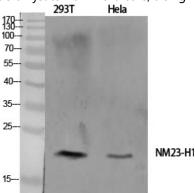




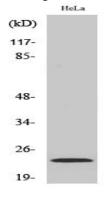
Immunohistochemistry analysis of NM23-H1 antibody in paraffin-embedded human brain tissue.



Western blot analysis of lysate from HeLa cells, uising NM23-H1 antibody.

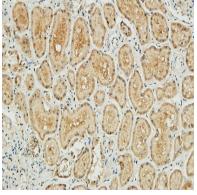


Western Blot analysis of various cells using NM23-H1 Polyclonal Antibody diluted at 1: 1000

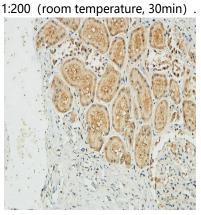




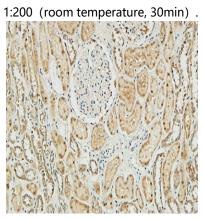
Western Blot analysis of HeLa cells using NM23-H1 Polyclonal Antibody diluted at 1: 1000



Immunohistochemical analysis of paraffin-embedded Human kidney. 1, Antibody was diluted at 1:100 (4°, overnight) . 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3, Secondary antibody was diluted at



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Immunohistochemical analysis of paraffin-embedded Human kidney. 1, Antibody was diluted at 1:100 (4°, overnight) . 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200 (room temperature, 30min).



Note

For research use only.