NM23-H1 Mouse mAb

CatalogNo: YM0478

Key Features

Host Species
- Mouse

Reactivity
- Human

Applications
- WB,IHC,IF,FC,ELISA

MW
- 17kD (Calculated)

Recommended Dilution Ratios

WB 1:500-1:2000
IHC 1:200-1:1000
IF 1:200-1:1000
Flow Cyt 1:200-1:400
ELISA 1:10000
Not yet tested in other applications.

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Basic Information

Clonality	Monoclonal

Immunogen Information

Immunogen	Purified recombinant fragment of human NM23-H1 expressed in E. Coli.
Specificity	NM23-H1 Monoclonal Antibody detects endogenous levels of NM23-H1 protein.

Target Information

Gene name NME1

Protein Name Nucleoside diphosphate kinase A

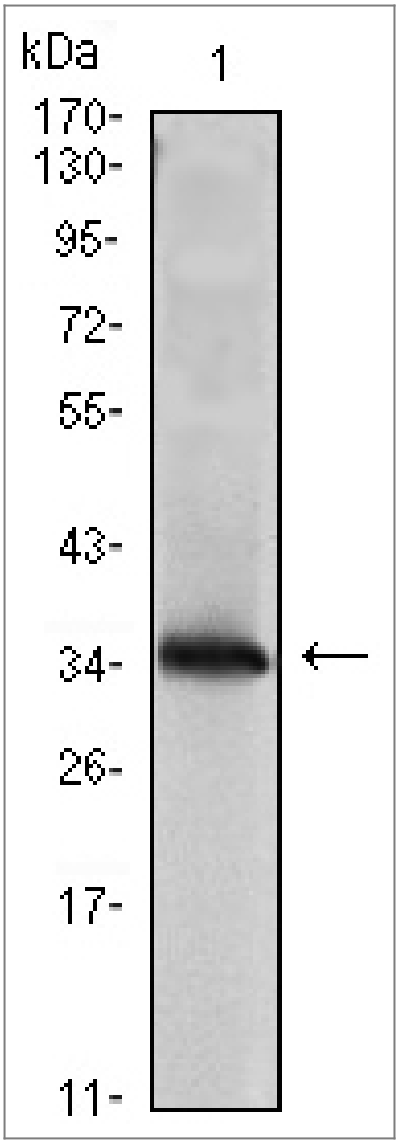
Organism	Gene ID	UniProt ID
Human	4830;	P15531;
Mouse		P15532;

Cellular Localization Cytoplasm . Nucleus . 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.

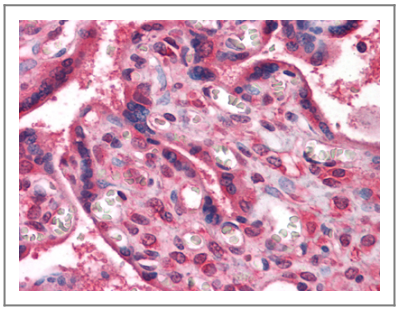
Tissue specificity Isoform 1 is expressed in heart, brain, placenta, lung, liver, skeletal muscle, pancreas, spleen and thymus. Expressed in lung carcinoma cell lines but not in normal lung tissues. Isoform 2 is ubiquitously expressed and its expression is also related to tumor differentiation.

Function 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.,

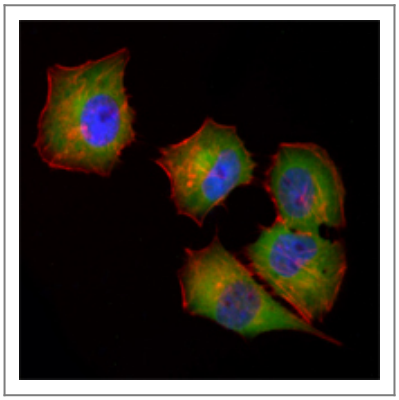
Validation Data



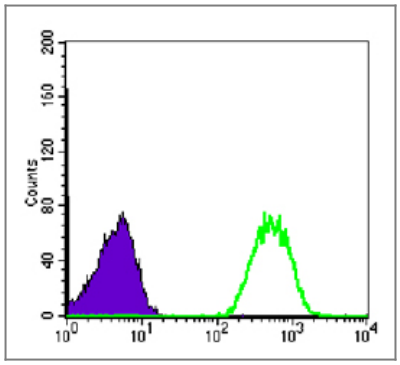
Western Blot analysis using NM23-H1 Monoclonal Antibody against NME1-hIgGFc transfected HEK293 cell lysate.



Immunohistochemistry analysis of paraffin-embedded human Placenta tissues with AEC staining using NM23-H1 Monoclonal Antibody.



Immunofluorescence analysis of Hela cells using NM23-H1 Monoclonal Antibody (green). Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin. Blue: DRAQ5 fluorescent DNA dye.



Flow cytometric analysis of Jurkat cells using NM23-H1 Monoclonal Antibody (green) and negative control (purple).

Contact information

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Please scan the QR code to access additional product information: **NM23-H1 Mouse mAb**