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KD-Validated Anti-NME1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1081

Specification

KD-Validated Anti-NME1 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P15531
Reactivity	**Human**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 17 kDa , observed, 17 kDa KDa**
Gene Name	**NME1**
Aliases	**NME1; NME/NM23 Nucleoside Diphosphate Kinase 1; NM23-H1; NDPKA; NM23; Non-Metastatic Cells 1, Protein (NM23A) Expressed In; Tumor Metastatic Process-Associated Protein; Metastasis Inhibition Factor Nm23; Nucleoside Diphosphate Kinase A; Granzyme A-Activated DNase; NDP Kinase A; EC 2.7.4.6; GAAD; Epididymis Secretory Sperm Binding Protein; NDPK-A; NDK A; NDKA; AWD; NBS; NB**
Immunogen	**A synthesized peptide derived from human NM23**

KD-Validated Anti-NME1 Rabbit Monoclonal Antibody - Additional Information

Gene ID	**4830**

Other Names
Nucleoside diphosphate kinase A, NDK A, NDP kinase A, 2.7.4.6, Granzyme A-activated DNase, GAAD, Metastasis inhibition factor nm23, NM23-H1, Tumor metastatic process-associated protein, NME1, NDPKA, NM23

KD-Validated Anti-NME1 Rabbit Monoclonal Antibody - 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

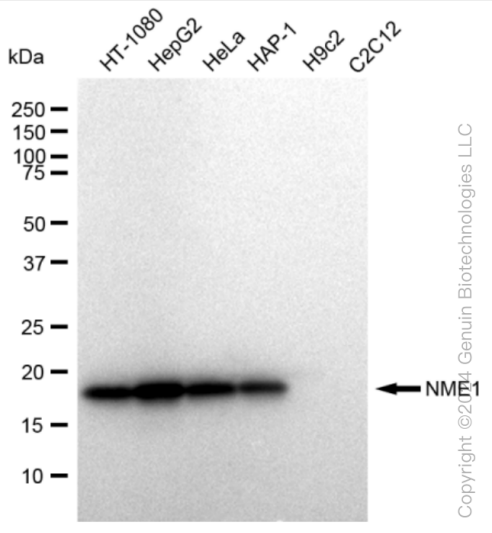
Tissue Location
Isoform 1 is expressed in heart, brain, placenta, lung, liver, skeletal muscle, pancreas, spleen and thymus. Expressed in lung carcinoma cell lines but not in normal lung tissues. Isoform 2 is ubiquitously expressed and its expression is also related to tumor differentiation.

KD-Validated Anti-NME1 Rabbit Monoclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-NME1 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-NME1 antibody (Cat#AGI1081). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-NME1 antibody (Cat#AGI1081, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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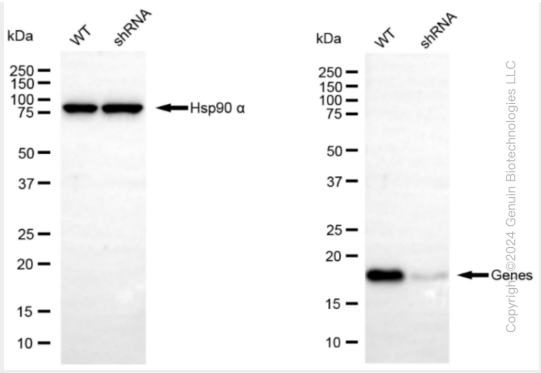
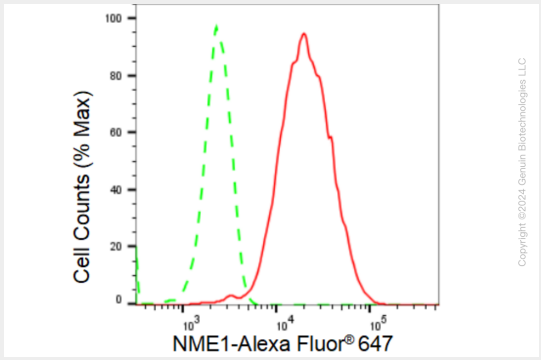
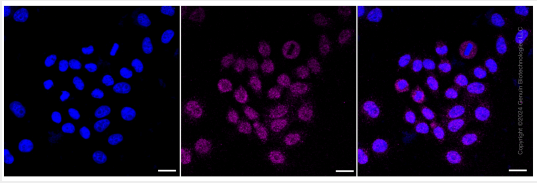


Western blotting analysis using anti-NME1 antibody (Cat#AGI1081). NME1 expression in wild type (WT) and NME1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-NME1 antibody (Cat#AGI1081, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of NME1 expression in HepG2 cells using NME1 antibody (Cat#AGI1081, 1:2,000). Green, isotype control; red, NME1.



Immunocytochemical staining of HepG2 cells with NME1 antibody (Cat#AGI1081, 1:1,000). Nuclei were stained blue with DAPI; NME1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar: 20 µm.