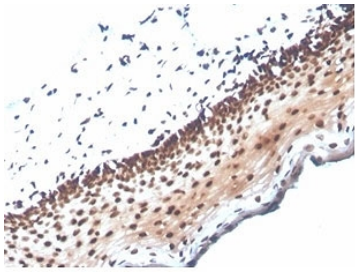
NME1 Antibody / Nucleoside Diphosphate Kinase A Antibody [clone NME1/2737] (V9453)

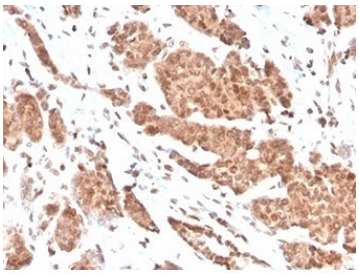
Catalog No.	Formulation	Size
V9453-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9453-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9453SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

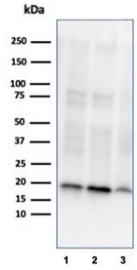
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	NME1/2737
Purity	Protein A/G affinity
UniProt	P15531
Localization	Nucleus, Cytoplasm
Applications	ELISA (order BSA-free format for coating) Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This NME1 Antibody / Nucleoside Diphosphate Kinase A Antibody is available for research use only.



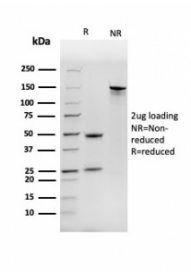
NME1 Antibody NME1/2737 in Human Cervix IHC. Immunohistochemistry staining of FFPE human cervix tissue with NME1 Antibody / Nucleoside Diphosphate Kinase A Antibody, clone NME1/2737. HIER was performed by boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9, for 20 min followed by cooling before testing. The observed staining demonstrates NME1 expression in human cervix tissue.



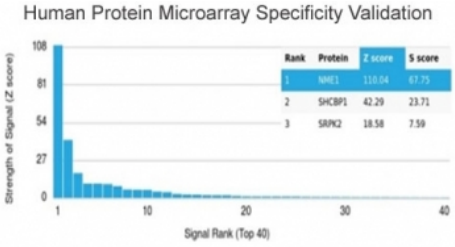
NME1 Antibody NME1/2737 in Human Breast Carcinoma IHC. Immunohistochemistry analysis of FFPE human breast carcinoma tissue with NME1 Antibody / Nucleoside Diphosphate Kinase A Antibody, clone NME1/2737. Tissue sections underwent HIER by boiling in 10 mM Tris with 1 mM EDTA, pH 9, for 20 min and were allowed to cool before testing. NM23-H1 staining demonstrates NME1 detection in human breast carcinoma tissue.



NME1 Antibody NME1/2737 in A549, PC-3 and K562 Cells WB. Western blot testing of human A549 lung carcinoma, PC-3 prostate cancer and K562 leukemia cell lysates with NME1 Antibody / Nucleoside Diphosphate Kinase A Antibody, clone NME1/2737. Lane 1: A549; Lane 2: PC-3; Lane 3: K562. A band is detected at approximately 17 kDa, consistent with the predicted molecular weight of NME1. This NME1 Antibody demonstrates detection of nucleoside diphosphate kinase A across multiple human cancer cell lines.



Purified NME1 Antibody NME1/2737 SDS-PAGE. Gel run analysis of purified, BSA-free NME1 Antibody / Nucleoside Diphosphate Kinase A Antibody, clone NME1/2737. Analysis of the purified mouse monoclonal antibody provides confirmation of antibody integrity and purity.



NME1 Antibody NME1/2737 Protein Microarray Validation. Protein microarray analysis of NME1 Antibody / Nucleoside Diphosphate Kinase A Antibody, clone NME1/2737, using a HuProt array containing more than 19,000 full-length human proteins. The antibody demonstrates prominent recognition of the intended NME1 target. The Z-score represents signal strength in standard deviations above the array mean, while the S-score measures separation between the intended target and the next strongest signal, providing an assessment of relative target specificity.

Description

NME1 Antibody / Nucleoside Diphosphate Kinase A Antibody detects NME1, a multifunctional protein encoded by the NME1 gene and historically known as NM23-H1. NME1 functions as nucleoside diphosphate kinase A (NDPK-A), an enzyme involved in maintaining cellular nucleotide pools by catalyzing the transfer of phosphate groups between nucleoside di- and triphosphates. NME1 is widely expressed and has been studied extensively for its roles in nucleotide metabolism, cell signaling, proliferation, differentiation and cancer biology.

NME1 belongs to the NME/NM23 family of nucleoside diphosphate kinases. NME1 and the closely related NME2 encode the A and B forms of nucleoside diphosphate kinase, respectively, and can assemble into oligomeric enzyme complexes. In addition to its nucleotide kinase activity, NME1 has been associated with several cellular processes involving protein interactions, DNA regulation and signaling. These diverse activities have made NME1 an important target for investigating the relationship between nucleotide homeostasis and cellular behavior.

NME1 was originally identified through studies comparing melanoma cell lines with different metastatic potential, where reduced NM23 expression was associated with highly metastatic cells. This discovery established NME1 as one of the earliest described metastasis suppressor genes. Subsequent research has investigated NME1 in cell motility, invasion, adhesion and metastatic progression across multiple cancer types. The relationship between NME1 expression and

cancer behavior can vary with tumor type and biological context, making NM23-H1 an enduring subject of cancer and metastasis research. NCBI continues to note the original association between reduced NME1 expression and highly metastatic cells.

Nucleoside diphosphate kinase A is also studied outside its original metastasis-suppressor context. NME1 has been implicated in cellular differentiation, development and regulation of signaling networks, while alterations in its expression or activity may influence cellular responses associated with tumor progression. Its combination of enzymatic activity and metastasis-associated biology makes NME1 relevant to studies spanning metabolism, signal transduction and cancer cell behavior.

Clone NME1/2737 is a mouse monoclonal antibody generated against recombinant full-length human NME1 protein. It has been evaluated by Western blot and immunohistochemistry, including human cancer cell lines and FFPE human tissues. This antibody is also Protein Microarray Validated using a HuProt array containing more than 19,000 full-length human proteins. The Z-score measures target signal strength in standard deviations above the array mean, while the S-score measures separation between the intended target and the next strongest signal, providing an assessment of relative target specificity. NSJ Bioreagents supplies antibodies for cancer, metabolism and cell biology research. An NME1 Antibody can be used to investigate nucleoside diphosphate kinase A expression, NM23-H1 biology, nucleotide metabolism and mechanisms associated with tumor progression and metastasis.

For related reagents used to investigate intracellular signaling, regulation of cell behavior and cancer-associated signaling pathways, explore our Signal Transduction Antibodies page.

Application Notes

Optimal dilution of the NME1 Antibody / Nucleoside Diphosphate Kinase A Antibody should be determined by the researcher.

Immunogen

Recombinant full-length human NME1 protein was used as the immunogen for the NME1 antibody.

Storage

Aliquot the NME1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

NME1 antibody, Nucleoside Diphosphate Kinase A antibody, NM23-H1 antibody, NM23 antibody, NDPK-A antibody, NDKA antibody

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