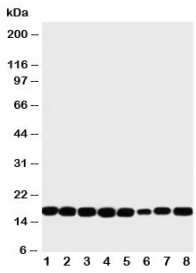
NM23-H1 Antibody / NDP Kinase A Antibody (R30927)

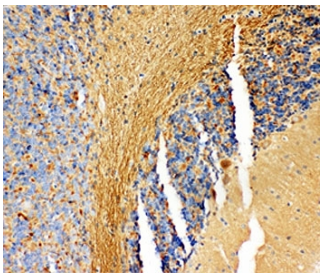
Catalog No.	Formulation	Size
R30927	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

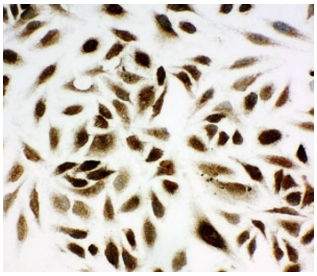
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P15531
Applications	Western Blot : 0.5-1ug/ml IHC (FFPE) : 0.5-1ug/ml Immunocytochemistry : 0.5-1ug/ml Flow Cytometry : 1-3ug/10^6 cells
Limitations	This NM23-H1 Antibody / NDP Kinase A Antibody is available for research use only.



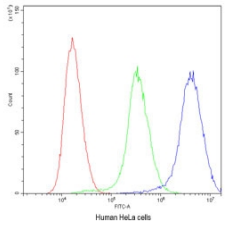
NM23-H1 Antibody in Human and Rat Samples WB. Western blot testing of rat and human lysates with NM23-H1 Antibody / NDP Kinase A Antibody. Lane 1: rat heart; Lane 2: rat brain; Lane 3: rat liver; Lane 4: rat skeletal muscle; Lane 5: human PANC-1 pancreatic cancer cells; Lane 6: human HeLa cervical cancer cells; Lane 7: human SK-OV-3 ovarian cancer cells; Lane 8: human COLO320 colorectal cancer cells. A band is detected at approximately 17 kDa, consistent with the predicted molecular weight of NME1. This NM23-H1 Antibody demonstrates NDP kinase A detection across multiple tissues and cancer cell lines.



NM23-H1 Antibody in Rat Cerebellum IHC. Immunohistochemistry staining of FFPE rat cerebellum tissue with NM23-H1 Antibody / NDP Kinase A Antibody. HIER was performed by steaming tissue sections in pH 6 citrate buffer for 20 min followed by cooling before testing. The observed staining demonstrates NME1 expression in rat cerebellum tissue.



NM23-H1 Antibody in HeLa Cervical Cancer Cells IF. Immunofluorescence staining of human HeLa cervical cancer cells with NM23-H1 Antibody / NDP Kinase A Antibody. The observed fluorescence demonstrates NME1 detection in HeLa cells by IF.



NM23-H1 Antibody in HeLa Cervical Cancer Cells FACS. Flow cytometry analysis of human HeLa cervical cancer cells with NM23-H1 Antibody / NDP Kinase A Antibody at 1 ug/million cells following blocking with goat sera. Red represents cells alone, green represents the isotype control and blue represents NM23-H1 antibody staining. Antibody-associated fluorescence demonstrates NME1 detection in HeLa cells by FACS.

Description

NM23-H1 Antibody / NDP 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, also called NDP kinase A or NDPK-A, and participates in maintaining cellular nucleotide pools through phosphate transfer between nucleoside di- and triphosphates. In addition to this enzymatic function, NM23-H1 has been extensively investigated in cell signaling, migration, 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. These proteins can assemble into oligomeric complexes and help regulate the balance of nucleoside triphosphates required for numerous cellular processes. The enzymatic activity of NDP kinase A therefore connects NME1 with nucleotide metabolism, energy-dependent cellular functions and broader mechanisms of cell regulation.

NM23-H1 is particularly well known for its relationship with cancer metastasis. NME1 was originally identified through studies in which reduced NM23 expression was associated with increased metastatic potential. Subsequent research has investigated NME1 in cell migration, invasion, adhesion and other processes influencing tumor progression. The relationship between NM23-H1 expression and clinical behavior varies among tumor types and biological contexts, but metastasis-associated biology remains an important area of NME1 research.

NDP kinase A has also been studied in cellular processes extending beyond metastasis suppression. NME1 has been associated with regulation of signaling pathways, cellular differentiation and interactions with proteins involved in DNA-associated processes. These diverse activities make NM23-H1 relevant to research examining how nucleotide metabolism and intracellular regulatory mechanisms influence normal cellular behavior and disease.

This rabbit polyclonal NM23-H1 Antibody was generated against a C-terminal sequence of human NME1 and has been evaluated by Western blot, immunohistochemistry, immunocytochemistry and flow cytometry. Validation includes human

cancer cell lines and rat tissues, while stated species reactivity includes human, mouse and rat. NSJ Bioreagents supplies antibodies for cancer, metabolism and cell biology research. An NM23-H1 Antibody can be used to investigate NDP kinase A expression, nucleotide metabolism, cell migration and mechanisms associated with tumor progression.

For additional research on NME1 expression, nucleotide metabolism and metastasis-associated biology, see our NME1 Antibody / Nucleoside Diphosphate Kinase A Antibody page.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the NM23-H1 Antibody / NDP Kinase A Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

An amino acid sequence from the C-terminus of human NM23 (EELVDYTSCAQNWIYE) was used as the immunogen for this NM23 / NM23-H1 antibody.

Storage

After reconstitution, the NM23 / NM23-H1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

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

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