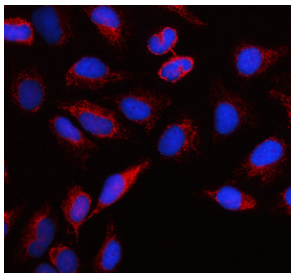
NME6 Antibody / Nucleoside Diphosphate Kinase 6 Antibody (RQ8417)

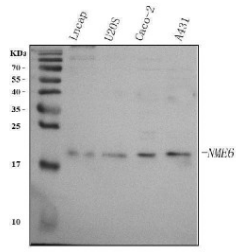
Catalog No.	Formulation	Size
RQ8417	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

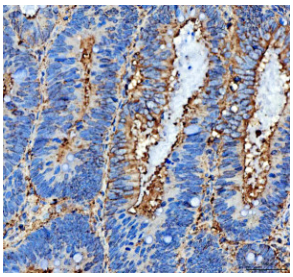
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	O75414
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Immunofluorescence: 5ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This NME6 Antibody / Nucleoside Diphosphate Kinase 6 Antibody is available for research use only.



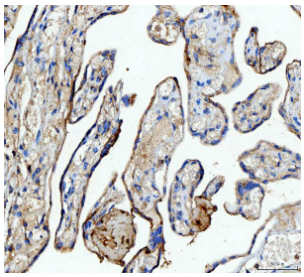
NME6 Antibody Human HeLa Cervical Cancer Cell IF/ICC. Immunofluorescent staining of human HeLa cervical cancer cells was performed with NME6 Antibody at 5 ug/ml following enzyme antigen retrieval. Cy3-conjugated secondary antibody was used to visualize NME6 (red), with DAPI as a nuclear counterstain (blue). NME6 staining shows a predominantly cytoplasmic, punctate distribution surrounding the nuclei, consistent with mitochondrial localization. This NME6 Antibody demonstrates cellular localization of Nucleoside Diphosphate Kinase 6 in human HeLa cervical cancer cells.



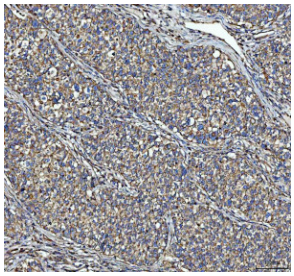
NME6 Antibody Human Cancer Cell WB. Western blot analysis was performed with NME6 Antibody on human LNCaP prostate cancer, U2OS osteosarcoma, Caco-2 colorectal cancer and A431 epidermoid carcinoma cell lysates (lanes 1-4). Samples were separated by 5-20% SDS-PAGE under reducing conditions, and the antibody was used at 0.5 ug/ml overnight at 4oC. A specific band is detected at approximately 21 kDa, consistent with the expected molecular weight of NME6. This NME6 Antibody demonstrates detection of Nucleoside Diphosphate Kinase 6 across multiple human cancer cell lines.



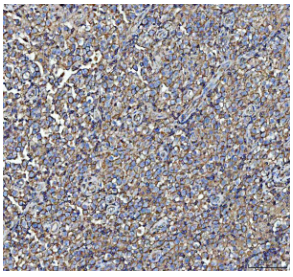
NME6 Antibody Human Colon Cancer IHC. IHC staining of FFPE human colon cancer tissue was performed with NME6 Antibody at 2 ug/ml following heat-induced epitope retrieval in pH 8 EDTA buffer. HRP-conjugated secondary antibody and DAB were used for detection. NME6 staining is observed predominantly in the cytoplasm of tumor cells, with variable staining intensity across the tissue. This NME6 Antibody demonstrates localization of Nucleoside Diphosphate Kinase 6 in human colon cancer tissue.



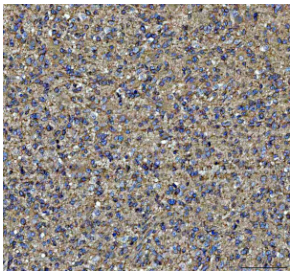
NME6 Antibody Human Placenta IHC. IHC staining of FFPE human placenta tissue was performed with NME6 Antibody at 2 ug/ml following heat-induced epitope retrieval in pH 8 EDTA buffer. HRP-conjugated secondary antibody and DAB were used for detection. NME6 staining is observed in placental villi, with predominantly cytoplasmic staining in trophoblast cells. This NME6 Antibody demonstrates localization of Nucleoside Diphosphate Kinase 6 in human placenta tissue.



NME6 Antibody Human Lung Cancer IHC. IHC staining of FFPE human lung cancer tissue was performed with NME6 Antibody at 2 ug/ml following heat-induced epitope retrieval in pH 8 EDTA buffer. HRP-conjugated secondary antibody and DAB were used for detection. NME6 staining is observed predominantly in the cytoplasm of tumor cells, with widespread staining across the cancer tissue. This NME6 Antibody demonstrates localization of Nucleoside Diphosphate Kinase 6 in human lung cancer tissue.



NME6 Antibody Human Spermatocytic Seminoma IHC. IHC staining of FFPE human spermatocytic seminoma testis tissue was performed with NME6 Antibody at 2 ug/ml following heat-induced epitope retrieval in pH 8 EDTA buffer. HRP-conjugated secondary antibody and DAB were used for detection. NME6 staining is observed predominantly in the cytoplasm of tumor cells, with widespread staining throughout the seminoma tissue. This NME6 Antibody demonstrates localization of Nucleoside Diphosphate Kinase 6 in human spermatocytic seminoma tissue.



NME6 Antibody Human Glioblastoma IHC. IHC staining of FFPE human glioblastoma tissue was performed with NME6 Antibody at 2 ug/ml following heat-induced epitope retrieval in pH 8 EDTA buffer. HRP-conjugated secondary antibody and DAB were used for detection. NME6 staining is observed predominantly in the cytoplasm of glioblastoma cells, with diffuse staining throughout the tumor tissue. This NME6 Antibody demonstrates localization of Nucleoside Diphosphate Kinase 6 in human glioblastoma tissue.

Description

NME6 Antibody / Nucleoside Diphosphate Kinase 6 Antibody detects NME6, a mitochondrial member of the NME/NM23 family of nucleoside diphosphate kinases. Also known as NM23-H6 and NDPK-H6, NME6 is associated with mitochondrial nucleotide metabolism and contributes to the maintenance of nucleotide pools required for cellular and mitochondrial processes. Its localization and relationship to other NME family proteins make NME6 a useful target for studies of mitochondrial metabolism and energy homeostasis.

Nucleoside diphosphate kinases generally catalyze the transfer of phosphate groups between nucleoside triphosphates and nucleoside diphosphates, helping maintain balanced nucleotide pools independently of the specific nucleobase. These nucleotide pools support numerous cellular processes, including nucleic acid metabolism, signaling and energy-dependent reactions. A NME6 Antibody can support investigation of this NME family member and its relationship to mitochondrial nucleotide homeostasis.

NME6 is associated with mitochondria, distinguishing it from several better-characterized members of the NME family with predominantly cytoplasmic or other cellular distributions. Mitochondria require tightly regulated nucleotide availability to support their own nucleic acid metabolism and numerous biochemical reactions. NME6 has consequently attracted interest in research examining how nucleotide metabolism is integrated with mitochondrial function and cellular bioenergetics.

The NME protein family is biologically diverse, with individual members differing in enzymatic activity, subcellular localization and physiological roles. Some NME proteins have functions extending beyond classical nucleoside diphosphate kinase activity, including participation in signaling and regulation of cellular behavior. For this reason, studies of NME6 are useful for defining the specific functions of this mitochondrial family member rather than assuming that all NME proteins perform equivalent cellular roles.

NSJ Bioreagents offers NME6 Antibody reagents for investigating NME6 expression and localization. A Nucleoside Diphosphate Kinase 6 Antibody can support research into mitochondrial nucleotide metabolism, NME/NM23 family biology, cellular energy homeostasis and mechanisms connecting nucleotide balance with mitochondrial function.

Researchers studying NME6 in mitochondrial nucleotide metabolism and energy homeostasis can explore our Mitochondria Marker Antibody page for additional targets involved in mitochondrial function, metabolism and cellular bioenergetics.

Application Notes

Optimal dilution of the NME6 Antibody / Nucleoside Diphosphate Kinase 6 Antibody should be determined by the researcher.

Immunogen

An E.coli-derived human recombinant protein (M1-A186) was used as the immunogen for the NME6 antibody.

Storage

After reconstitution, the NME6 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

NME6 antibody, Nucleoside Diphosphate Kinase 6 antibody, Nucleoside Diphosphate Kinase NME6 antibody, NM23-H6 antibody, NDPK-H6 antibody

Copyright © NSJ Bioreagents. All rights reserved.