

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Product datasheet for UM800025

NM23A (NME1) Mouse Monoclonal Antibody [Clone ID: UMAB94]

Product data:

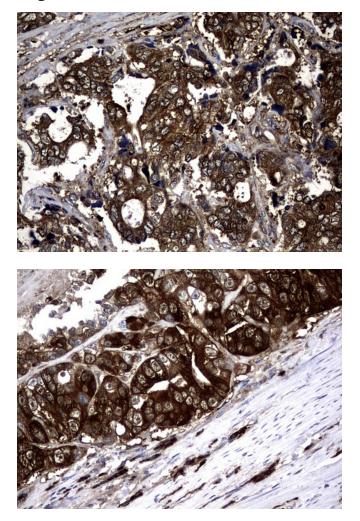
Product Type:	Primary Antibodies
Clone Name:	UMAB94
Applications:	10k-ChIP, IF, IHC, WB
Recommended Dilution:	WB 1:500, IHC 1:100, IF 1:100
Reactivity:	Human, Rat, Monkey, Dog
Host:	Mouse
lsotype:	lgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human NME1 (NP_937818) produced in E.coli.
Formulation:	PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration:	0.5~1.0 mg/ml (Lot Dependent)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	19.5 kDa
Gene Name:	NME/NM23 nucleoside diphosphate kinase 1
Database Link:	<u>NP_937818</u> <u>Entrez Gene 191575 RatEntrez Gene 4830 Human</u> <u>P15531</u>



Service Minimum Service Monoclonal Antibody [Clone ID: UMAB94] – UM800025

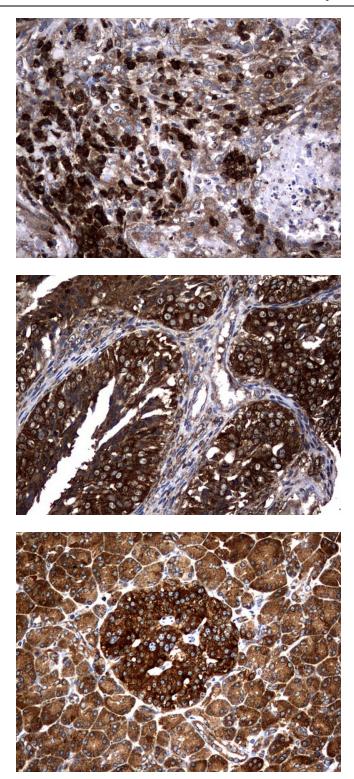
Background:	This gene (NME1) was identified because of its reduced mRNA transcript levels in highly metastatic cells. Nucleoside diphosphate kinase (NDK) exists as a hexamer composed of 'A' (encoded by this gene) and 'B' (encoded by NME2) isoforms. Mutations in this gene have been identified in aggressive neuroblastomas. Two transcript variants encoding different isoforms have been found for this gene. Co-transcription of this gene and the neighboring downstream gene (NME2) generates naturally-occurring transcripts (NME1-NME2), which encodes a fusion protein comprised of sequence sharing identity with each individual gene product. [provided by RefSeq, Jul 2008]
Synonyms:	AWD; GAAD; NB; NBS; NDKA; NDPK-A; NDPKA; NM23; NM23-H1
Protein Families:	Druggable Genome, Stem cell - Pluripotency
Protein Pathways:	Metabolic pathways, Purine metabolism, Pyrimidine metabolism

Product images:



Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human breast tissue using anti-NME1 mouse monoclonal antibody. (UM800025; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

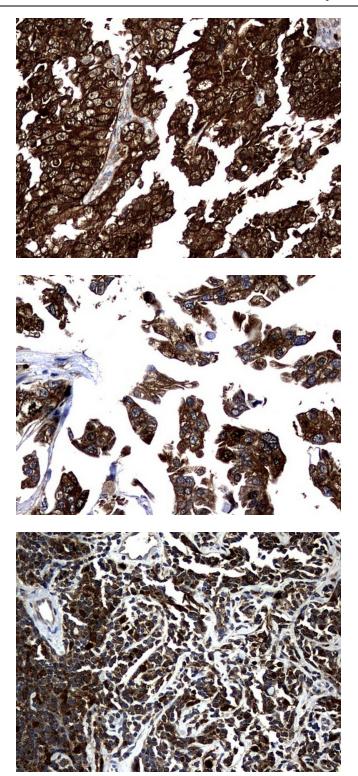
Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human colon tissue using anti-NME1 mouse monoclonal antibody. (UM800025; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



Immunohistochemical staining of paraffinembedded Carcinoma of Human lung tissue using anti-NME1 mouse monoclonal antibody. (UM800025; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-NME1 mouse monoclonal antibody. (UM800025; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

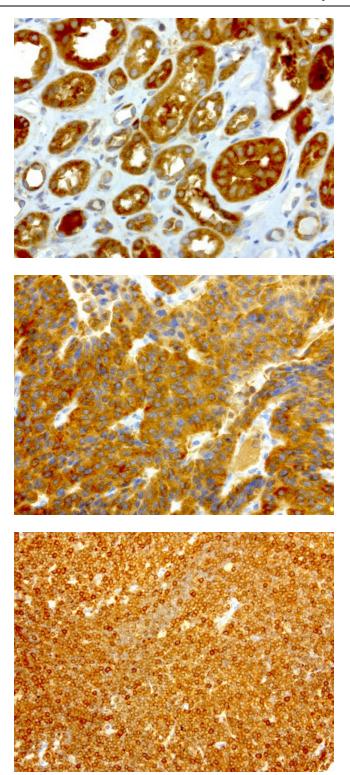
Immunohistochemical staining of paraffinembedded Human pancreas tissue using anti-NME1 mouse monoclonal antibody. (UM800025; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-NME1 mouse monoclonal antibody. (UM800025; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

Immunohistochemical staining of paraffinembedded Carcinoma of Human bladder tissue using anti-NME1 mouse monoclonal antibody. (UM800025; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)

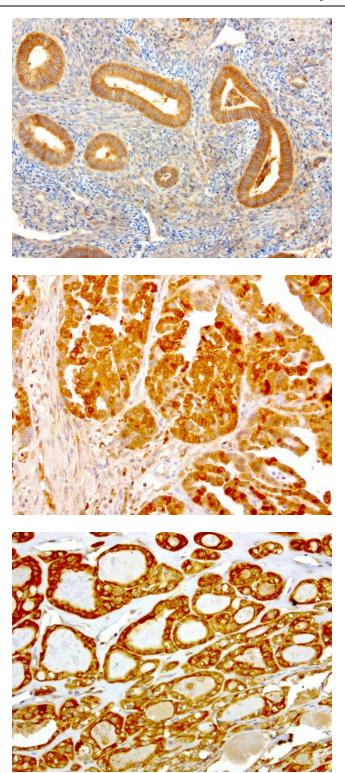
Immunohistochemical staining of paraffinembedded Human lymphoma tissue using anti-NME1 mouse monoclonal antibody. (UM800025; heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min)



Immunohistochemical staining of paraffinembedded human kidney using anti-NME1 clone UMAB94 mouse monoclonal antibody (UM800025) at 1:4000 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI ACCEL pH8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Cytoplasmic staining is very strong in the tubule epithleial cells of the kidney.

Immunohistochemical staining of paraffinembedded human lung cancer using anti-NME1 clone UMAB94 mouse monoclonal antibody (UM800025) at 1:4000 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI ACCEL pH8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Cytoplasmic staining is very strong in the tumor cells.

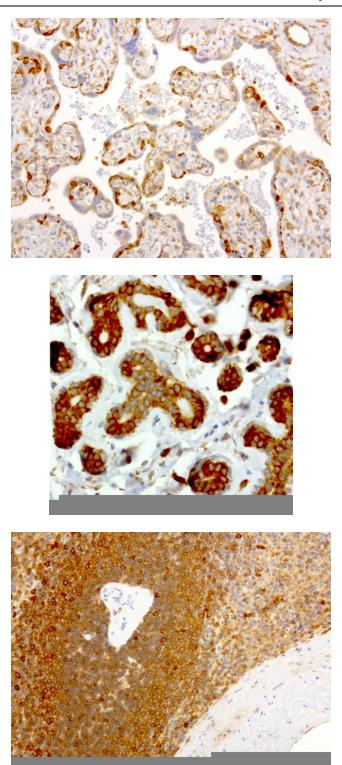
Immunohistochemical staining of paraffinembedded human lymphoma using anti-NME1 clone UMAB94 mouse monoclonal antibody (UM800025) at 1:8000 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI ACCEL pH8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Cytoplasmic staining is very strong in the tumor cells.



Immunohistochemical staining of paraffinembedded human normal adjacent endometruim using anti-NME1 clone UMAB94 mouse monoclonal antibody (UM800025) at 1:8000 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI ACCEL pH8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Cytoplasmic staining is very strong in the glandular epithelial cells and weaker stain was seen in the stromal cells.

Immunohistochemical staining of paraffinembedded human ovarian carcinoma using anti-NME1 clone UMAB94 mouse monoclonal antibody (UM800025) at 1:8000 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI ACCEL pH8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Cytoplasmic staining is very strong in the tumor cells.

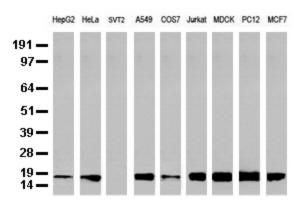
Immunohistochemical staining of paraffinembedded human thyroid cancer using anti-NME1 clone UMAB94 mouse monoclonal antibody (UM800025) at 1:8000 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI ACCEL pH8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Cytoplasmic staining is very strong in the tumor cells.



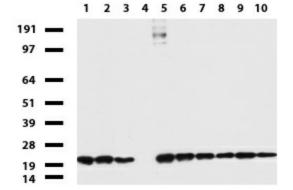
Immunohistochemical staining of paraffinembedded human placenta using anti-NME1 clone UMAB94 mouse monoclonal antibody (UM800025) at 1:4000 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI ACCEL pH8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Cytoplasmic staining is very strong in the stromal cells but weak to no staining seen in the trophoblast cell.

Immunohistochemical staining of paraffinembedded human normal adjacent breast ducts using anti-NME1 clone UMAB94 mouse monoclonal antibody (UM800025) at 1:4000 with Polink2 Broad HRP DAB detection kit; heatinduced epitope retrieval with GBI ACCEL pH8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Cytoplasmic staining is very strong in the breast epithelial cells.

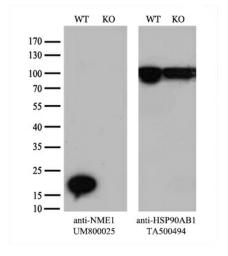
Immunohistochemical staining of paraffinembedded human spleen using anti-NME1 clone UMAB94 mouse monoclonal antibody (UM800025) at 1:4000 with Polink2 Broad HRP DAB detection kit; heat-induced epitope retrieval with GBI ACCEL pH8.7 HIER buffer using pressure chamber for 3 minutes at 110C. Cytoplasmic staining is very strong in both the red and white pulp of the spleen.



Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-NME1 monoclonal antibody (Clone UMAB94).



Western blot of human tissue lysates (15ug) from 10 different tissues (1: Testis, 2: Omentum, 3: Uterus, 4: Breast, 5: Brain, 6: Liver, 7: Ovary, 8: Thyroid, 9: Colon, 10: Spleen). Diluation: 1:500.



Equivalent amounts of cell lysates (10 ug per lane) ofwild-type 293T cells (WT, Cat# LC810293T) and NME1-Knockout 293T cells (KO, Cat# [LC840085]) were separated by SDS-PAGE and immunoblotted with anti-NME1 monoclonal antibody UM800025 (1:500). Then the blotted membrane was stripped and reprobed with anti-HSP90 antibody as a loading control.

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

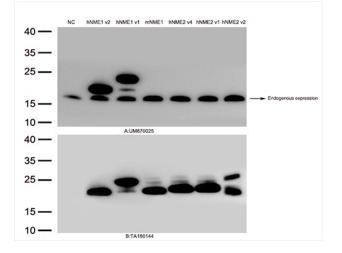
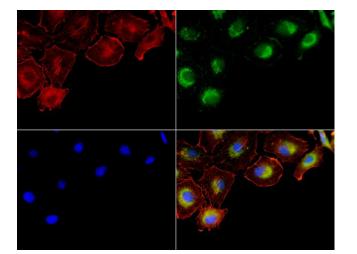


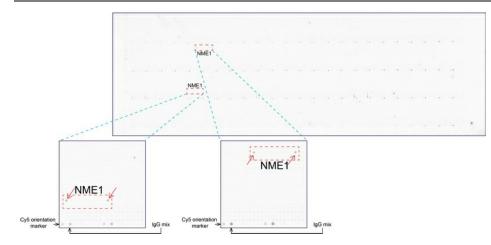
Figure A, Western blot analysis of overexpressed lysates(15ug per lane) from HEK293T cells transfected with empty plasmid ([PS100001], NC) , human NME1 v2 plasmid ([RC201731], hNME1 v2), human NME1 v1 plasmid ([RC200517], hNME1 v1), mouse NME1 plasmid ([RC200680], hNME2 v4), human NME2 v4 plasmid ([RC200680], hNME2 v4), human NME2 v1 plasmid ([RC219564], hNME2 v1), human NME2 v2 plasmid ([RC223639], hNME2 v2), using anti-NME1 antibody [UM870025] (1:500). Figure B, Western blot analysis of the same samples as figure A with anti-DDK antibody ([TA180144], 1:1000)

293T NIH/3T3 Caco-2 C2C12 U-251 SKOV3 A431 40 35 -25 -15 -10 -A:UM870025 100-70 -55 -40 -35 -B:TA81100

Figure A, Western blot analysis of extracts (50ug) from 7 cell lines lysates by using anti-NME1 antibody. ([UM870025], 1:500). Figure B, Western blot analysis of the same samples as figure A with anti-beta Actin antibody ([TA811000], 1:500)



Immunofluorescent staining of A549 cells using NME1 mouse monoclonal antibody (UM800025, green). Actin filaments were labeled with TRITCphalloidin (red), and nuclear with DAPI (blue). The three-color overlay image is located at the bottom-right corner.



OriGene overexpression protein microarray chip was immunostained with UltraMAB anti-NME1 mouse monoclonal antibody (UM800025). The positive reactive proteins are highlighted with two red arrows in the enlarged subarray. All the positive controls spotted in this subarray are also labeled for clarification.