

Product datasheet for RC220517

NM23A (NME1) (NM_198175) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: NM23A (NME1) (NM_198175) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: NME1
Synonyms: AWD; GAAD; NB; NBS; NDKA; NDPK-A; NDPKA; NM23; NM23-H1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC220517 representing NM_198175
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGTGCTACTGTCTACTTTAGGGATCGTCTTTCAAGGCGAGGGCCCTCTATCTCAAGCTGTGATACAG
GAACCATGGCCAACTGTGAGCGTACCTTCATTGCGATCAAACCAGATGGGGTCCAGCGGGGTCTTGTGGG
AGAGATTATCAAGCGTTTTGAGCAGAAAGGATCCGCCTGTTGGTCTGAAATTCATGCAAGCTCCGAA
GATCTTCTCAAGGAACACTACGTTGACCTGAAGACCGTCCATCTTTGCCGGCCTGGTGAATACATGC
ACTCAGGGCCGGTAGTTGCCATGGTCTGGGAGGGGCTGAATGTGGTGAAGACGGGCCGAGTCATGCTCGG
GGAGACCAACCCTGCAGACTCCAAGCCTGGGACCATCCGTGGAGACTTCTGCATACAAGTTGGCAGGAAC
ATTATACATGGCAGTGATTCTGTGGAGAGTGCAGAGAAGGAGATCGGCTTGTGGTTTCACCTGAGGAAC
TGGTAGATTACACGAGCTGTGCTCAGAAGGAGGATCTGGCAGCAAATGATATCCTGGATT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC220517 representing NM_198175
Red=Cloning site Green=Tags(s)
MVLSTLGIIVFQGEPPISSCDTGTMANCERTFIAIKPDGVQRGLVGEI IKRFEQKGFRLVGLKFMQASE
DLLKEHYVDLKDPRFFAGLVKYMHSPPVAMVWEGLNVVKTGRVMLGETNPADSKPGTIRGDFCIQVGRN
IIHGSDSVESAKEI GLWFHPEELVDYTSQAQNWIYE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6498_d02.zip



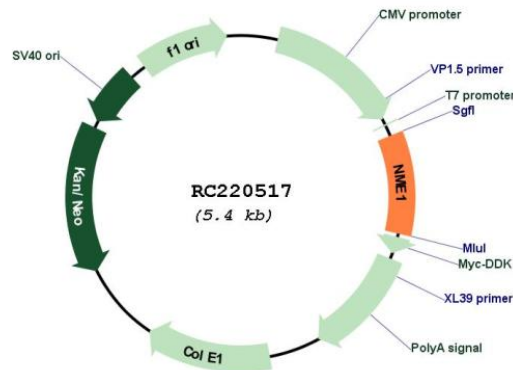
[View online »](#)

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



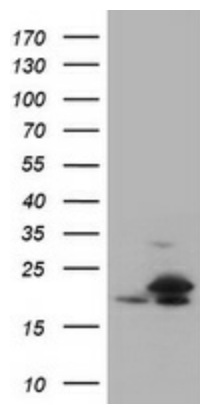
ACCN: NM_198175

ORF Size: 531 bp

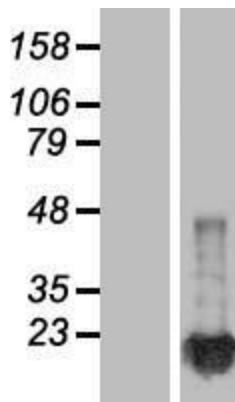
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

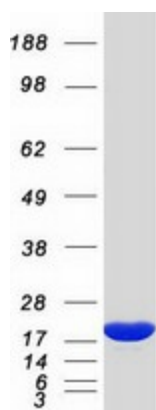
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_198175.1 , NP_937818.1
RefSeq Size:	1031 bp
RefSeq ORF:	534 bp
Locus ID:	4830
UniProt ID:	P15531
Cytogenetics:	17q21.33
Protein Families:	Druggable Genome, Stem cell - Pluripotency
Protein Pathways:	Metabolic pathways, Purine metabolism, Pyrimidine metabolism
MW:	19.5 kDa
Gene Summary:	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]

Product images:


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NME1 (Cat# RC220517, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NME1 (Cat# [TA801245]). Positive lysates [LY404982] (100ug) and [LC404982] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY404982]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220517 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NME1 protein (Cat# [TP320517]). The protein was produced from HEK293T cells transfected with NME1 cDNA clone (Cat# RC220517) using MegaTran 2.0 (Cat# [TT210002]).