

## Product datasheet for **RC219564**

### NME2 (NM\_002512) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** NME2 (NM\_002512) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** NME2  
**Synonyms:** NDKB; NDPK-B; NDPKB; NM23-H2; NM23B; PUF  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC219564 representing NM\_002512  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCAACCTGGAGCGCACCTTCATCGCCATCAAGCCGGACGGCGTGCAGCGGGCCTGGTGGCGGAGA  
TCATCAAGCGCTTCGAGCAGAAGGGATTCCGCCTCGTGGCCATGAAGTTCCTCCGGGCTCTGAAGAACA  
CCTGAAGCAGCACTACATTGACCTGAAAGACCGACCATTCTTCCCTGGGCTGGTGAAGTACATGAACTCA  
GGCCCGGTTGTGCCATGGTCTGGGAGGGGCTGAACGTGGTGAAGACAGGCCGAGTGATGCTTGGGGAGA  
CCAATCCAGCAGATCAAAGCCAGGCACCATTCTGTTGGGACTTCTGCATTGAGTTGGCAGGAACATCAT  
TCATGGCAGTGATTGAGTAAAAAGTGTGAAAAAGAAATCAGCCTATGGTTTAAGCTGAAGAACTGGT  
GACTACAAGTCTTGTGCTCATGACTGGGTCTATGAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC219564 representing NM\_002512  
Red=Cloning site Green=Tags(s)  
MANLERTFIAIKPDGVQRGLVGEIIKRFEQKGFRLVAMKFLRASEEHLKQHYIDLKDRPFFPGLVKYMNS  
GPVVAMVWEGLNVVKTGRVMLGETNPADSKPGTIRGDFCIQVGRNIIHGSDSVKSAEKEISLWFKPEELV  
DYKSCAHDWVYE

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6266\\_e09.zip](https://cdn.origene.com/chromatograms/mk6266_e09.zip)



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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_002512

ORF Size: 456 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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:**

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\\_002512.4](#)

**RefSeq Size:** 822 bp

**RefSeq ORF:** 459 bp

**Locus ID:** 4831

**UniProt ID:** [P22392](#)

**Cytogenetics:** 17q21.33

**Domains:** NDK

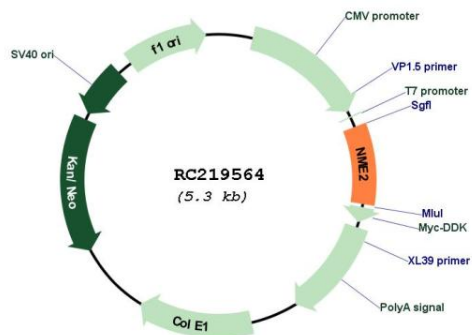
**Protein Families:** Druggable Genome, Transcription Factors

**Protein Pathways:** Metabolic pathways, Purine metabolism, Pyrimidine metabolism

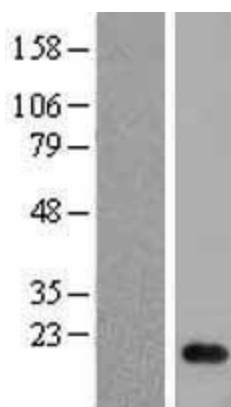
**MW:** 17.1 kDa

**Gene Summary:** Nucleoside diphosphate kinase (NDK) exists as a hexamer composed of 'A' (encoded by NME1) and 'B' (encoded by this gene) isoforms. Multiple alternatively spliced transcript variants have been found for this gene. Read-through transcription from the neighboring upstream gene (NME1) generates naturally-occurring transcripts (NME1-NME2) that encode a fusion protein comprised of sequence sharing identity with each individual gene product. [provided by RefSeq, Nov 2010]

## Product images:



Circular map for RC219564



Western blot validation of overexpression lysate (Cat# [LY419276]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC219564 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).