

## Product datasheet for RC202603

### NME4 (NM\_005009) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** NME4 (NM\_005009) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** NME4  
**Synonyms:** NDPK-D; nm23-H4; NM23H4  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC202603 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGGGCGGCTCTTCTGGCGCTCCGCGCTGCGGGGGCTGCGCTGCGGCCCGGGGCCCGGGCCGAGCC  
TGCTAGTGCGCCACGGCTCGGGAGGGCCCTCTGGACCCGGGAGCGGACCTGGTGGCGGTGAAGCCGA  
TGGCGTCAACGGCGGCTCGTTGGGACGTGATCCAGCGCTTTGAGAGCGGGGCTTACGCTGGTGGG  
ATGAAGATGCTGCAGGCACCAGAGAGCGTCTTCCGAGCACTACCAGGACCTGCGGAGGAAGCCCTTCT  
ACCTGCCCTCATCCGCTACATGAGCTCTGGCCTGTGGTGGCCATGGTCTGGGAAGGTACAATGTCGT  
CCGCGCCTCGAGGGCCATGATTGGACACACCGACTCGGCTGAGGCTGCCCCAGGAACCATAAGGGGTGAC  
TTCAGCGTCCACATCAGCAGGAATGTCATCCACGCCAGCGACTCCGTGGAGGGGGCCAGCGGGAGATCC  
AGCTGTGGTTCCAGAGCAGTGGTGGTGGTGGGCGAGCGGGGCCAGCACAGCAGCATCCACCCAGC  
C

**ACGCGT**ACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC202603 protein sequence  
 Red=Cloning site Green=Tags(s)

MGGLFWRSALRGLRCPRAPGPSLLVRHSGGPSWTRERTLVAVKPDGVQRRLVGDVIQRFERRGFTLVG  
MKMLQAPESVLAEHYQDLRRKPFYPALIRYMSSGPVVMVWEGYNVVRASRAMIGHTDSAEAAPGTIRGD  
FSVHISRNVIHASDSVEGAQREIQLWFQSSSELVSWADGGQHSSIHPA

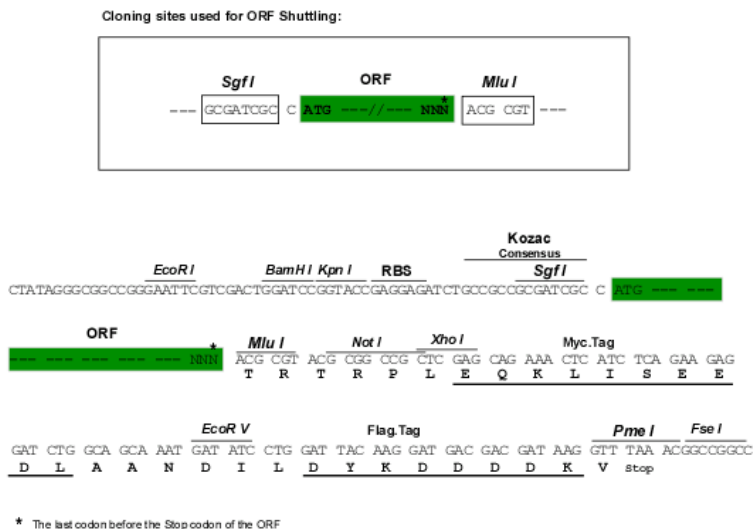
**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV



**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6144\\_h01.zip](https://cdn.origene.com/chromatograms/mk6144_h01.zip)

**Restriction Sites:** Sgfl-MluI

**Cloning Scheme:**



**ACCN:** NM\_005009

**ORF Size:** 561 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:**

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\\_005009.3](#)

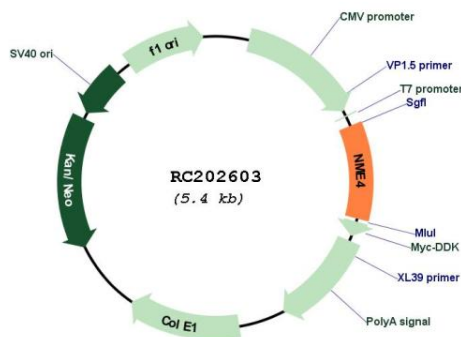
**RefSeq Size:** 1059 bp

**RefSeq ORF:** 564 bp

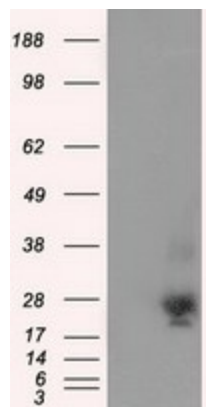
**Locus ID:** 4833

**UniProt ID:** [O00746](#)  
**Cytogenetics:** 16p13.3  
**Domains:** NDK  
**Protein Families:** Druggable Genome  
**Protein Pathways:** Metabolic pathways, Purine metabolism, Pyrimidine metabolism  
**MW:** 20.7 kDa  
**Gene Summary:** The nucleoside diphosphate (NDP) kinases (EC 2.7.4.6) are ubiquitous enzymes that catalyze transfer of gamma-phosphates, via a phosphohistidine intermediate, between nucleoside and dioxynucleoside tri- and diphosphates. The enzymes are products of the nm23 gene family, which includes NME4 (Milon et al., 1997 [PubMed 9099850]).[supplied by OMIM, May 2008]

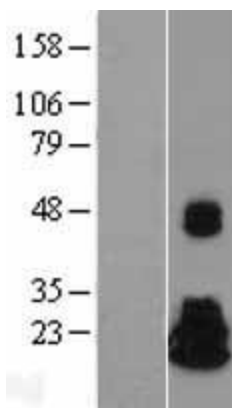
### Product images:



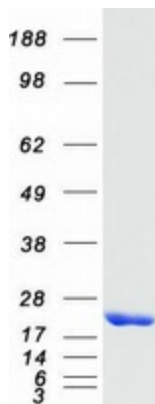
Circular map for RC202603



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NME4 (Cat# RC202603, 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-NME4 (Cat# [TA501110]). Positive lysates [LY401559] (100ug) and [LC401559] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401559]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202603 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NME4 protein (Cat# [TP302603]). The protein was produced from HEK293T cells transfected with NME4 cDNA clone (Cat# RC202603) using MegaTran 2.0 (Cat# [TT210002]).