

## **Product datasheet for MC225941**

## Nme2 (NM\_001077529) Mouse Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** Nme2 (NM\_001077529) Mouse Untagged Clone

Tag: Tag Free Symbol: Nme2

Synonyms: NM23-H2; nm23-M2; NM23B

**Vector:** pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Cell Selection: Neomycin

Fully Sequenced ORF: >MC225941 representing NM\_001077529

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

**GCCGCGATCGCC** 

ATGGCCAACCTCGAGCGTACCTTCATTGCCATCAAGCCAGATGGCGTGCAGCGCGGCCTGGTGGGCGAGA
TCATCAAACGGTTCGAGCAGAAGGGGTTCCGCCTGGTGGCCATGAAGTTCCTTCGGGCCTCTGAAGAACA
CCTGAAGCAGCATTACATCGACCTGAAAGACCGTCCTTTCTTCCCGGGGCTGGTGAAGTACATGAACTCG
GGGCCCGTGGTGGCCATGGTCTGGGAGGGGCTCAATGTGGTGAAAACCGGCCGAGTGATGCTGGGGGAGA
CCAATCCAGCTGATTCAAAACCAGGCACCATCCGTGGGGATTTCTGCATTCAAGTTGGCAGGAACATCAT
TCATGGCAGTGATTCAGTGGAGAGTGCTGAGAAAAGAGATCCATCTGTGGTTTAAGCCCGAAGAACTGATC

GACTACAAGTCTTGTGCCCATGACTGGGTGTACGAGTAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM 001077529

**Insert Size:** 459 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).



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Clone contains native stop codon, and expresses the complete ORF without any c-terminal

tag.

**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:** <u>NM 001077529.2, NP 001070997.1</u>

RefSeq Size: 747 bp
RefSeq ORF: 459 bp
Locus ID: 18103
UniProt ID: Q01768
Cytogenetics: 11 D

**Gene Summary:** Major role in the synthesis of nucleoside triphosphates other than ATP. The ATP gamma

phosphate is transferred to the NDP beta phosphate via a ping-pong mechanism, using a phosphorylated active-site intermediate (By similarity). Negatively regulates Rho activity by interacting with AKAP13/LBC. Acts as a transcriptional activator of the MYC gene; binds DNA non-specifically. Binds to both single-stranded guanine- and cytosine-rich strands within the nuclease hypersensitive element (NHE) III(1) region of the MYC gene promoter. Does not bind to duplex NHE III(1). Has G-quadruplex (G4) DNA-binding activity, which is independent of its nucleotide-binding and kinase activity. Binds both folded and unfolded G4 with similar low nanomolar affinities. Stabilizes folded G4s regardless of whether they are prefolded or not. Exhibits histidine protein kinase activity (By similarity).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (2) differs in the 5' UTR, compared to variant 1. Variants 1 and

2 encode the same protein.