

Product datasheet for MR228152

Nme2 (NM_001077529) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Nme2 (NM_001077529) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Nme2
Synonyms: NM23-H2; nm23-M2; NM23B
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR228152 representing NM_001077529
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCAACCTCGAGCGTACCTTCATTGCCATCAAGCCAGATGGCGTGCAGCGGGCCTGGTGGCGGAGA
TCATCAAACGGTTCGAGCAGAAGGGGTTCCGCCTGGTGGCCATGAAGTTCCTTCGGGCCTCTGAAGAACA
CCTGAAGCAGCATTACATCGACCTGAAAGACCGTCCTTTCTCCCGGGGCTGGTGAAGTACATGAACTCG
GGGCCCGTGGTGGCCATGGTCTGGGAGGGGCTCAATGTGGTAAAACGGGCCGAGTGATGCTGGGGGAGA
CCAATCCAGCTGATTCAAAACCAGGCACCATCCGTGGGATTTCTGCATTCAAGTTGGCAGGAACATCAT
TCATGGCAGTGATTCAGTGGAGAGTGCTGAGAAAAGAGATCCATCTGTGGTTAAGCCCGAAGAAGTATC
GACTACAAGTCTTGTCATGACTGGGTGACGAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR228152 representing NM_001077529
Red=Cloning site Green=Tags(s)

MANLERTFIAIKPDGVQRGLVGEIIKRFEQKGFRLVAMKFLRASEEHLKQHYIDLKDRPFFPGLVKYMNS
GPVVAMVWEGLNVVKTGRVMLGETNPADSKPGTIRGDFCIQVGRNIIHGSDSVESAKEIHLWFKPEELI
DYKSCAHDWVYE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI



Cloning Scheme:


ACCN: NM_001077529

ORF Size: 456 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_001077529.2](#), [NP_001070997.1](#)

RefSeq Size: 747 bp

RefSeq ORF: 459 bp

Locus ID: 18103

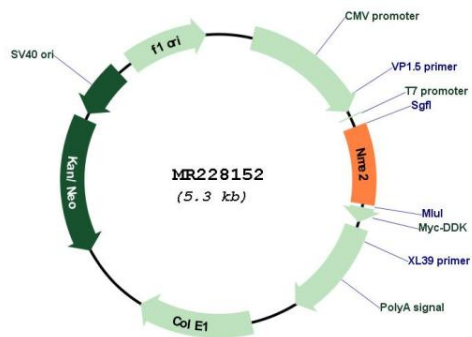
UniProt ID: [Q01768](#)

Cytogenetics: 11 D

MW: 17.4 kDa

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]

Product images:



Circular map for MR228152