

Product datasheet for RC221555

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ARMET (MANF) (NM_006010) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: ARMET (MANF) (NM_006010) Human Tagged ORF Clone

Tag: Myc-DDK Symbol: ARMET

Synonyms: ARMET; ARP

Mammalian Cell Neomycin

Selection:

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

ORF Nucleotide >RC221555 representing NM_006010

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGAGGAGGATGAGGAGGATGTGGGCCACGCAGGGGCTGGCGGTGGCGCTGGCTCTGAGCGTGCTGCCGG
GCAGCCGGGCGCTGCGGCCGGCGACTGCGAAGTTTGTATTTCTTATCTGGGAAGATTTTACCAGGACCT
CAAAGACAGAGATGTCACATTCTCACCAGCCACTATTGAAAACGAACTTATAAAGTTCTGCCGGGAAGCA
AGAGGCAAAGAGAATCGGTTGTGCTACTATATCGGGGCCACAGATGATGCAGCCACCAAAATCATCAATG
AGGTATCAAAGCCTCTGGCCCACCACATCCCTGTGGAGAAGATCTGTGAGAAGCTTAAGAAGAAGGACAG
CCAGATATGTGAGCTTAAGTATGACAAGCAGATCGACCTGAGCACAGTGGACCTGAAGAAAGCTCCGAGTT
AAAGAGCTGAAGAAGATTCTGGATGACTGGGGGGGAGACATGCAAAGGCTGTGCAGAAAAAGTCTGACTACA
TCCGGAAGATAAATGACTGATGCCTAAATATGCCCCCAAGGCAGCCAGTGCACGGACCGATTTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC221555 representing NM_006010

Red=Cloning site Green=Tags(s)

MRRMRRMWATQGLAVALALSVLPGSRALRPGDCEVCISYLGRFYQDLKDRDVTFSPATIENELIKFCREA RGKENRLCYYIGATDDAATKIINEVSKPLAHHIPVEKICEKLKKKDSQICELKYDKQIDLSTVDLKKLRV

KELKKILDDWGETCKGCAEKSDYIRKINELMPKYAPKAASARTDL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6112 d12.zip





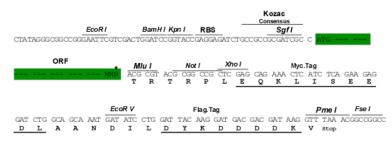
Restriction Sites:

Sgfl-Mlul

Cloning Scheme:

Cloning sites used for ORF Shuttling:

| Sgf | ORF | Miu |
|--- | GCGATCGC | C | ATG | --- | NIN | ACG | CGT | ---



^{*} The last codon before the Stop codon of the ORF

ACCN: NM_006010

ORF Size: 555 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: <u>NM 006010.5</u>, <u>NP 006001.4</u>

 RefSeq Size:
 993 bp

 RefSeq ORF:
 549 bp

 Locus ID:
 7873

 UniProt ID:
 P55145



Cytogenetics: 3p21.2

Protein Families: Druggable Genome, Secreted Protein

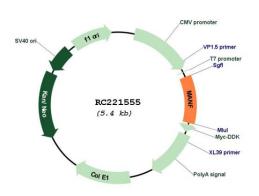
MW: 21.6 kDa

Gene Summary: The protein encoded by this gene is localized in the endoplasmic reticulum (ER) and golgi, and

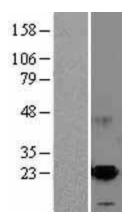
is also secreted. Reducing expression of this gene increases susceptibility to ER stress-induced death and results in cell proliferation. Activity of this protein is important in promoting the survival of dopaminergic neurons. The presence of polymorphisms in the N-terminal arginine-rich region, including a specific mutation that changes an ATG start codon to AGG, have been reported in a variety of solid tumors; however, these polymorphisms were later shown to exist in normal tissues and are thus no longer thought to be tumor-related.

[provided by RefSeq, Apr 2014]

Product images:

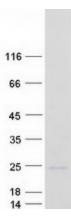


Circular map for RC221555



Western blot validation of overexpression lysate (Cat# [LY401818]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221555 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).





Coomassie blue staining of purified MANF protein (Cat# [TP321555]). The protein was produced from HEK293T cells transfected with MANF cDNA clone (Cat# RC221555) using MegaTran 2.0 (Cat# [TT210002]).