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# Product datasheet for RC224921

## NARF (NM_001038618) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | NARF (NM_001038618) Human Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | NARF |
| **Synonyms:** | IOP2 |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

**ORF Nucleotide Sequence:**

>RC224921 representing NM_001038618
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACTGCAGAGGAAGGAGTCCAACTTTCCCAGCAAAATGCCAAGGACTTCTTCCGCGTTCTGAACCTTA
ACAAGAAATGTGATACCTCAAAGCACAAAGTGCTGGTAGTGTCTGTGTGTCCTCAATCTTTGCCTTATTT
TGCTGCTAAATTCAACCTCAGTGTAACTGATGCATCCAGAAGACTCTGTGGTTTCCTCAAAAGTCTTGGG
GTGCACTATGTATTTGATACGACGATAGCTGCGGATTTTAGTATCCTGGAGAGTCAAAAAGAATTCGTGC
GTCGCTATCGCCAGCACAGTGAGGAGGAACGCACCCTGCCCATGCTGACCTCTGCCTGTCCTGGCTGGGT
CCGATACGCCGAGCGGGTGCTGGGTCGCCCCATCACTGCCCACCTCTGCACCGCCAAGTCCCCCCAGCAG
GTCATGGGCTCTTTGGTGAAGGATTATTTCGCCAGACAGCAGAACCTGTCTCCAGAGAAGATTTTCCACG
TCATTGTGGCCCCTTGTTATGACAAGAAGCTGGAGGCTCTTCAGGAAAGCCTTCCCCCTGCTTTGCATGG
CTCCCGGGGCGCTGACTGCGTGTTAACATCAGGTGAAATTGCTCAAATAATGGAGCAAGGTGACCTCTCA
GTGAGAGATGCTGCCGTCGACACTCTGTTTGGAGACTTGAAGGAGGACAAAGTGACGCGTCATGATGGAG
CCAGCTCAGACGGGCACCTGGCACACATCTTCAGACATGCGGCCAAGGAGCTGTTCAACGAGGATGTGGA
GGAGGTCACTTACCGAGCCCTGAGAAACAAAGACTTCCAAGAGGTCACCCTTGAGAAGAACGGAGAGGTG
GTGTTACGCTTTGCTGCAGCCTATGGCTTTCGAAACATCCAGAACATGATCCTGAAGCTTAAGAAGGGCA
AGTTCCCATTCCACTTTGTGGAGGTCCTCGCCTGTGCTGGAGGATGCTTAAATGGCAGAGGCCAAGCCCA
GACTCCAGACGGACATGCGGATAAGGCCCTGCTGCGGCAGATGGAAGGCATTTACGCTGACATCCCTGTG
CGGCGTCCGGAGTCCAGTGCACACGTGCAGGAGCTGTACCAGGAGTGGCTGGAGGGGATCAACTCCCCCA
AGGCCCGAGAGGTGCTGCATACCACGTACCAGAGCCAGGAGCGTGGCACACACAGCCTGGACATCAAGTG
G

AGCGGACCGACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC224921 representing NM_001038618
Red=Cloning site Green=Tags(s)

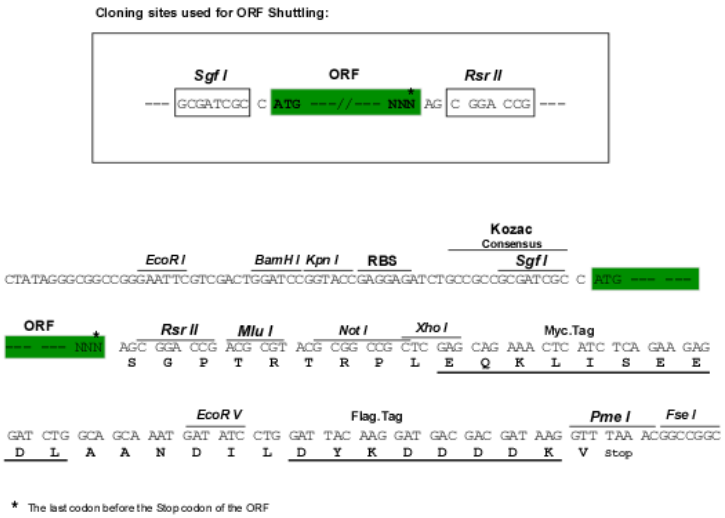
MTAEEGVQLSQQNAKDFFRVLNLNKKCDTSKHKVLVVSVCPQSLPYFAAKFNLSVTDASRRLCGFLKSLG
VHYVFDTTIAADFSILESQKEFVRRYRQHSEEERTLPMLTSACPGWVRYAERVLGRPITAHLCTAKSPQQ
VMGSLVKDYFARQQNLSPEKIFHVIVAPCYDKKLEALQESLPPALHGSRGADCVLTSGEIAQIMEQGDLS
VRDAAVDTLFGDLKEDKVTRHDGASSDGHLAHIFRHAAKELFNEDVEEVTYRALRNKDFQEVTLEKNGEV
VLRFAAAYGFRNIQNMILKLKKGKFPFHFVEVLACAGGCLNGRGQAQTPDGHADKALLRQMEGIYADIPV
RRPESSAHVQELYQEWLEGINSPKAREVLHTTYQSQERGTHSLDIKW

SGPTRTRRLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** https://cdn.origene.com/chromatograms/ja1301_h05.zip

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**




**ACCN:** NM_001038618

**ORF Size:** 1191 bp

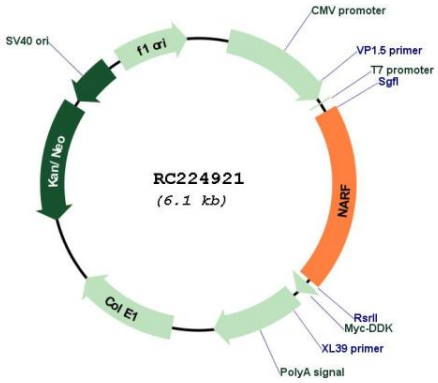
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone 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.

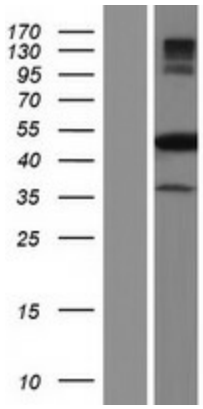
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

| | |
|---|---|
| **Reconstitution Method:** | 1. Centrifuge at 5,000xg for 5min.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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. |
| **Note:** | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required. |
| **RefSeq:** | NM_001038618.3 |
| **RefSeq Size:** | 1786 bp |
| **RefSeq ORF:** | 1194 bp |
| **Locus ID:** | 26502 |
| **UniProt ID:** | Q9UHQ1 |
| **Cytogenetics:** | 17q25.3 |
| **MW:** | 44.5 kDa |
| **Gene Summary:** | Several proteins have been found to be prenylated and methylated at their carboxyl-terminal ends. Prenylation was initially believed to be important only for membrane attachment. However, another role for prenylation appears to be its importance in protein-protein interactions. The only nuclear proteins known to be prenylated in mammalian cells are prelamin A- and B-type lamins. Prelamin A is farnesylated and carboxymethylated on the cysteine residue of a carboxyl-terminal CaaX motif. This post-translationally modified cysteine residue is removed from prelamin A when it is endoproteolytically processed into mature lamin A. The protein encoded by this gene binds to the prenylated prelamin A carboxyl-terminal tail domain. It may be a component of a prelamin A endoprotease complex. The encoded protein is located in the nucleus, where it partially colocalizes with the nuclear lamina. It shares limited sequence similarity with iron-only bacterial hydrogenases. Alternatively spliced transcript variants encoding different isoforms have been identified for this gene, including one with a novel exon that is generated by RNA editing. [provided by RefSeq, Jul 2008] |

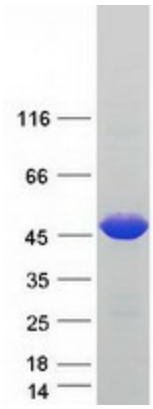
## Product images:




Circular map for RC224921




Western blot validation of overexpression lysate (Cat# [LY422003]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224921 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).




Coomassie blue staining of purified NARF protein (Cat# [TP324921]). The protein was produced from HEK293T cells transfected with NARF cDNA clone (Cat# RC224921) using MegaTran 2.0 (Cat# [TT210002]).