

Product datasheet for **MR224884**

Nipal4 (NM_172524) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	Nipal4
Synonyms:	9530066K23Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence: >MR224884 representing NM_172524
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**

ATGGAGCTGCGGGTCGCCAACGCCAATGGCAGCTGCGAGAACGGCTCCATAGTCAGCCTCTACTGCTCCT
CTCAGGAGGTCCTCTGTCAGATCGTGAGAGGCATCAGTCCTGAAGAGCCCTACAATGCCACCTTGATCAC
CTGGCAAGAGAGGGTCAGGAAGAAGTATGGCTTCTACATCGGTGTGGGCTCGCCTTCTCTCTGCTTC
CTCATCGGCACCAAGTGTATCCTTAAGAAGAAAGGCCCTATTGGCTTGTGGCCACAGGGGCCACAAGGG
CAGTGAATGGAGGCTACGGCTACCTGAAGGACCAATGTGGTGGGCTGGAATGGCTACCATGTCTGCTGG
AGAAGTTGCCAACTTCGGGGCCTATGCATTTGCACCTGCGACGGTTGTACACCGCTGGGAGCACTGAGC
GTCCTCATAAGTGCCATCTTTCTCCTACTGCCTGGGAGAGAGCCTGAATCTACTGGGAACTGGGCT
GTGTGATCTGTATGGCTGGCAGCACAGTGATGGTCATACATGCCCCAAAGAGGAGAAGGTCACCACTGT
TGCAGAGATGGCTTCAAGATGAAAGACACAGGGTTCATCGTCTTGTCTCTGCTGCTTCTGGTGGTGTCTTGC
CTCATCTCATCTTCATTGTTGCCCCACGTTACGGGCAAAGGAATATCCTCATTACATCATCATCTGCT
CCGTGATCGGATCCTTCTCCGTGACTGCCGTCAAGGGGCTTGGTGTACCATTAGGAACTTCTTCCAGGG
CTTACCAGTTGTGCGGCACCTCTCCCTTACATCCTGTCCCTCATCCTGGGTCTTTCTATCATCATCCAG
GTCAACTTCTCAACAGGGCACTGGATATTTTCAACACCTCATTGGTCTTCCCATCTACTACGTTTCT
TCACCACGGTGGTGGTGGCCTCTCCATCGTCTCTTCAAGGAGTGGTATACCATGTCTGCTGTGGACAT
TGTGGGCACCTGTCTGGCTTCTGTCACCATCATCCTGGGTGTTTTATGCTTCACGCTTTCAAGGATTTG
GACATCAACCAATCAGCTTGCCCCACACGCAAAAAACCACTCCAGTCCCGCCCAGAGCCCACAG
TCATTAAGCTAGAAGACAAGAATGTCTTGTAGATAACATAGAAGTGGCAGCACACCATCACCCCAACA
GAAGCCCAAAGTATTTATGACCGATTCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >MR224884 representing NM_172524
Red=Cloning site Green=Tags(s)

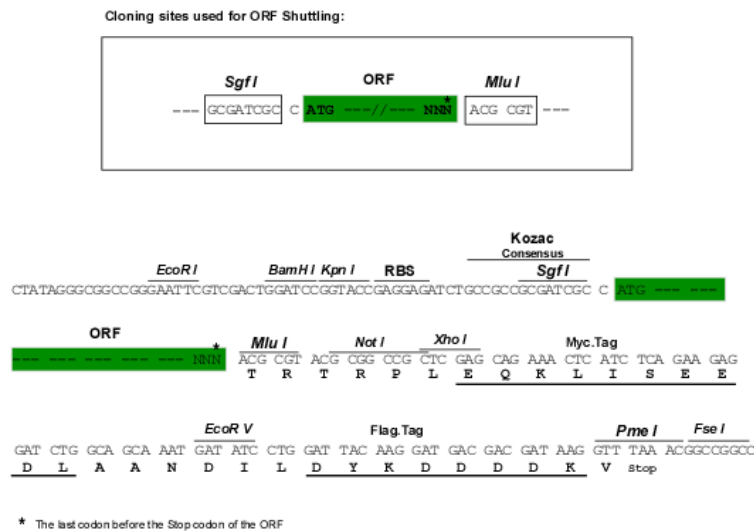
MELRVANANGSCENGSIIVSLYCSSQEVLCQIVRGISPEEPYNATLITWQERVKKYGFYIGVGLAFLSCF
LIGTSVILKKKGLIRLVATGATRAVNGGYGLKDPMMWAGMATMSAGEVANFGAYAFAPATVVTPLGALS
VLISAIFSSYCLGESLNLGKLGCVICMAGSTVMVIHAPKEEKVTTVAEMASKMKGTFIVFAVLLVWSC
LILIFIVAPRYGQRNIIYIIICSVIGSFVTAVKGLGVTIRNFFQGLPVVRHPLPYILSLILGLSIIQ
VNFLNRALDIFNTSLVFPIYYVFFTTVVVASSIVLFKEWYTMASVDIVGTLSGFVTIILGVFMLHAFKDL
DINQISLPHTHKNPTAPAPEPTVIKLEDKNVLVDNIELASTPSPQKPKVFMTDS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9018_e03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_172524

ORF Size: 1218 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_172524.3](#), [NP_766112.1](#)

RefSeq Size: 3295 bp

RefSeq ORF: 1221 bp

Locus ID: 214112

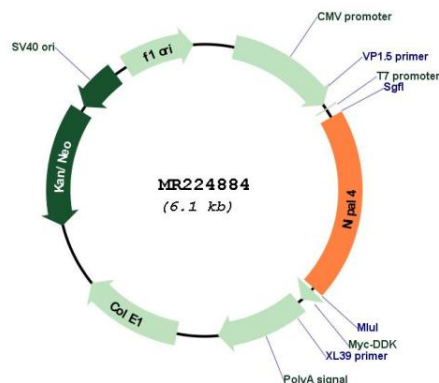
UniProt ID: [Q8BZF2](#)

Cytogenetics: 11 B1.1

MW: 44.5 kDa

Gene Summary: Acts as a Mg(2+) transporter. Can also transport other divalent cations such as Ba(2+), Mn(2+), Sr(2+) and Co(2+) but to a much less extent than Mg(2+). May be a receptor for ligands (trioxilins A3 and B3) from the hepoxilin pathway (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR224884