

Product datasheet for **RR206612**

Nagk (NM_001037768) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Product Name: Nagk (NM_001037768) Rat Tagged ORF Clone
 Tag: Myc-DDK
 Symbol: Nagk
 Synonyms: MGC124788
 Mammalian Cell Selection: Neomycin
 Vector: pCMV6-Entry (PS100001)
 E. coli Selection: Kanamycin (25 ug/mL)
 ORF Nucleotide Sequence: >RR206612 representing NM_001037768
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCCGCACTTTATGGTGGCGTGAAGGGGGAGGCACACGGTCCAAAGTCCTTTACTTTCTGAGGATG
 GGCAGATCCTGGCAGAAGCAGATGGACTGAGCACAAATCACTGGCTGATTGGCACAGGTACCTGTGTGGA
 GAGGATCAATGAGATGGTGGACAGGGCTAAACGGAAGGCTGGAGTGGATCCTCTGGTACCCCTTCGAAGC
 CTGGGCTTGTCCCTGAGTGGTGGGAGCAGGAGGATGCAGTGGGCTCCTGATGGAGGAGTTGAGGGACC
 GATTTCCCTACCTGAGTAAAGTTACTTCATCACCCTGATGCAGCAGGTTCCATCGCCACAGCTACACC
 GGATGGTGGGATTGTGCTCATCTCTGGAACAGGCTCCAACGTAGGCTTATCAACCCTGATGGCTCTGAG
 AGTGGCTGTGGTGGCTGGGGCCACATGATGGGAGACGAGGGATCAGCCTACTGGATTGCACACCAAGCTG
 TGAAAATTGTGTTTGACTCCATTGACAACCTGGAAGCAGCTCCTCATGATATTGGCCATGTCAAGCAGGC
 CATGTTCAACTACTTCCAGGTGCCAGATCGGCTAGGAATCCTCACTCACTTGATAGGGACTTTGATAAG
 TCCAAGTTTGCTGGATTTGTGAGAAAATTGCAGAAAGTGCAGAGGTGCACAGCAGGGAGACCCTCTTCCAGGTTCA
 TCTTCAGAAAGGCTGGGAGATGCTGGGAGACACGTTGTGGCAGTATTGCCAGAGATTGACCCAGTTTTT
 GTTCCAAGGGGAGCTTGGCCTCCCCATTCTGTGTGTGGCTCAGTGTGGAAGAGCTGGGAGCTACTGAAG
 GAAGGCTTTCTCTGGCACTGACGAGGGCCGAGAGCAACAGGCACAGAACTCTTCTCCAGTTTCACCC
 TGATGAAGTTGAGGCACTCTTCTGCACTGGGAGGGCCAGCCTGGGGCCAGGCACATTGGACACCACCT
 TCCCATGGACTACAGCGTCAATGCCATTGCCTTCTATTCTATACCTTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RR206612 representing NM_001037768
 Red=Cloning site Green=Tags(s)

MAALYGGVEGGGTRSKVLLLSEdGQILAEADGLSTNHwLIGTGTCVERINEMVDRaKRKAGVDPLVPLRS
 LGLSLSGGEQEDAVRLLMEELRDRFPYLSESYFITDDAAGSIATATPDGGIVLISGTGNSCRLINPDGSE
 SGCGGWGHMMGDEGSAYWIAHQAVKIVFDSIDNLEAAPHDIGHVKQAMFNyFQVPDRLLGILTHLYRDFDK
 SKFAGFCQKIAEGAQQGDPLSRFIFRKAGEMLGRHVAVLPEIDPVLFGELGLPILCVGSVWKSWellK
 EGFLlALtQGREQQAQNSFSSTLMKLRHSSALGGASLGARHIGHHLPMdYSVNAIAFYsYTF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1742_e04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_001037768

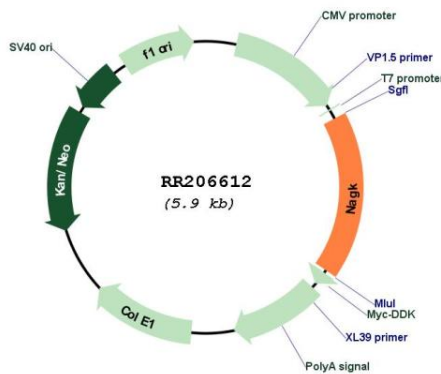
ORF Size: 1029 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:	<ol style="list-style-type: none"> 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_001037768.1</u> , <u>NP_001032857.1</u>
RefSeq Size:	1203 bp
RefSeq ORF:	1032 bp
Locus ID:	297393
UniProt ID:	<u>P81799</u>
Cytogenetics:	4q34
MW:	37.6 kDa
Gene Summary:	Converts endogenous N-acetylglucosamine (GlcNAc), a major component of complex carbohydrates, from lysosomal degradation or nutritional sources into GlcNAc 6-phosphate. Involved in the N-glycolylneuraminic acid (Neu5Gc) degradation pathway. Also has ManNAc kinase activity.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR206612