

## Product datasheet for MR205154

### Nagk (NM\_001164187) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Nagk (NM_001164187) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Nagk
Synonyms:	Gnk
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205154 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCGCGCTTTATGGTGGCGTGAAGGGGGAGGCACACGGTCCAAAGTCTTTTACTTTCTGAGGATG  
GGCAGATCCTGGCAGAAGCAGATGGACTGAGCACAAACCACTGGCTGATTGGCACAGACCAGTGTGTGGA  
GAGGATCAATGAGATGGTGGACAGGGCCAAACAGAAGGCTGGAGTGGATCCTCTGGTGCCCTTCGAAGC  
CTGGCCCTGTCCCTGAGTGGTGGGAGCAGGAGGATGCAGTGGGCTCCTGATTGAGGAGTTGAGGCACC  
GCTTTCCAACCTGAGTAAAACTACTTAATCACCACGGATGCAGCAGGTTCCATCGCCACAGCCACACC  
GGACGGTGGGATTGTGCTCATCTCTGGAACAGGCTCCAACGTAGGCTTATCAACCCTGATGGCTCCGAG  
AGTGGCTGTGGAGGCTGGGGCCACATGATGGGAGACGAGGGCTCAGCCTACTGGATTGCACACCAAGCTG  
TGAAAATTGTGTTTGATTCCATCGACAACCTGGAGGCAGCTCCTCATGATATTGGCCATGTCAAGCAGGC  
CATGTTGACTATTTCCAGGTGCCAGATCGGCTTGAATCCTCACCCATTTGTATAGGGACTTTGATAAA  
TGCAAGTTTGCTGGATTTTCCAGAAAATTGCAGAAGGTGCACATCAGGGAGACCCTCTTTCCAGGTACA  
TCTTCAGGAAGGCTGGAGAGATGCTGGGCAGACATGTTGTGGCAGTATTGCCAGAGATTGACCCGGTTTT  
GTTCCAAGGGGAGCTTGGCCTCCCCATTCTGTGTGGGCTCAGTGTGGAAGAGCTGGGAGCTCCTGAAG  
GAAGGCTTTCTCTGGCGCTGACGCTGGGCCGAGAGCAGCAGGCACAGAACTCTTCCAGCTTCACCC  
TGATGAAGTTGCGCATTCTTCTGCATTGGGGGTGCCAGCCTGGGGCCAGGCACATTGGATACCACT  
TCCCATGGACTACAGTATCAATGCCATTGCCTTCTATTCTATACCTTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR205154 protein sequence  
 Red=Cloning site Green=Tags(s)

MAALYGGVEGGGTRSKVLLL SEDGQILAEADGLSTNHWLIGTDQCVERINEMVDRAKQKAGVDPLVPLRS  
 LGLSLSGGEQEDAVRLLIEELRHRFPNLSENYLITTTDAAGSIATATPDGGIVLISGTGNSNCRLLINPDGSE  
 SGCGGWGHMMGDEGSAYWIAHQAVKIVFDSIDNLEAAPHDIGHVKQAMFDYFQVPDRLGILTHLYRDFDK  
 CKFAGFCQKIAEGAHQGDPLSRYIFRKAGEMLGRHVAVLPEIDPVLFGELGLPILCVGSYVWKSHELLK  
 EGFLLLALTLGREQQAQNSFSSFTLMKLRHSSALGGASLGARHIGYHLPMDYSINAI AFYSYTF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001164187

**ORF Size:** 1032 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 Size:** 1321 bp

**RefSeq ORF:** 879 bp

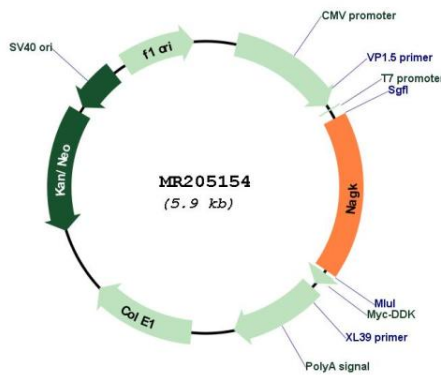
**Locus ID:** 56174

**Cytogenetics:** 6 C3

**MW:** 37.3 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 MR205154