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# Product datasheet for RG200113

## N acetylglucosamine kinase (NAGK) (NM_017567) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | N acetylglucosamine kinase (NAGK) (NM_017567) Human Tagged ORF Clone |
| **Tag:** | TurboGFP |
| **Symbol:** | N acetylglucosamine kinase |
| **Synonyms:** | GNK; HSA242910 |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-AC-GFP (PS100010) |
| **E. coli Selection:** | Ampicillin (100 ug/mL) |

**ORF Nucleotide Sequence:**

>RG200113 representing NM_017567
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCGCGATCTATGGGGGTGTAGAGGGGGGAGGCACACGATCCGAGGTCCTTTTAGTCTCAGAGGATG
GGAAGATCCTGGCAGAAGCAGATGGACTGAGCACAAACCACTGGCTGATCGGGACAGACAAGTGTGTGGA
GAGGATCAATGAGATGGTGAACAGGGCCAAACGGAAAGCAGGGGTGGATCCTCTGGTACCGCTGCGAAGC
TTGGGCCTATCTCTGAGCGGTGGGGACCAGGAGGACGCGGGGAGGATCCTGATCGAGGAGCTCAGGGACC
GATTTCCCTACCTGAGTGAAAGCTACTTAATCACCACCGATGCCGCCGGCTCCATCGCCACAGCTACACC
GGATGGTGGAGTTGTGCTCATATCTGGAACAGGCTCCAACTGCAGGCTCATCAACCCTGATGGCTCCGAG
AGTGGCTGCGGCGGCTGGGGCCATATGATGGGTGATGAGGGTTCAGCCTACTGGATCGCACACCAAGCAG
TGAAAATAGTGTTTGACTCCATTGACAACCTAGAGGCGGCTCCTCATGATATCGGCTACGTCAAACAGGC
CATGTTCCACTATTTCCAGGTGCCAGATCGGCTAGGGATACTCACTCACCTGTATAGGGACTTTGATAAA
TGCAGGTTTGCTGGGTTTTGCCGGAAAATTGCAGAAGGTGCTCAGCAGGGAGACCCCCTTTCCCGCTATA
TCTTCAGGAAGGCTGGGGAGATGCTGGGCAGACACATCGTAGCAGTGTTGCCCGAGATTGACCCGGTCTT
GTTCCAGGGCAAGATTGGACTCCCCATCCTGTGCGTGGGCTCTGTGTGGAAGAGCTGGGAGCTGCTGAAG
GAAGGTTTTCTTCTGGCGCTGACCCAGGGCAGAGAGATCCAGGCTCAGAACTTCTTCTCCAGCTTCACCC
TGATGAAGCTGAGGCACTCCTCCGCTCTGGGTGGGGCCAGCCTAGGGGCCAGGCACATCGGGCACCTCCT
CCCCATGGACTATAGCGCCAATGCCATTGCCTTCTATTCCTACACCTTTTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:**

>RG200113 representing NM_017567
Red=Cloning site Green=Tags(s)

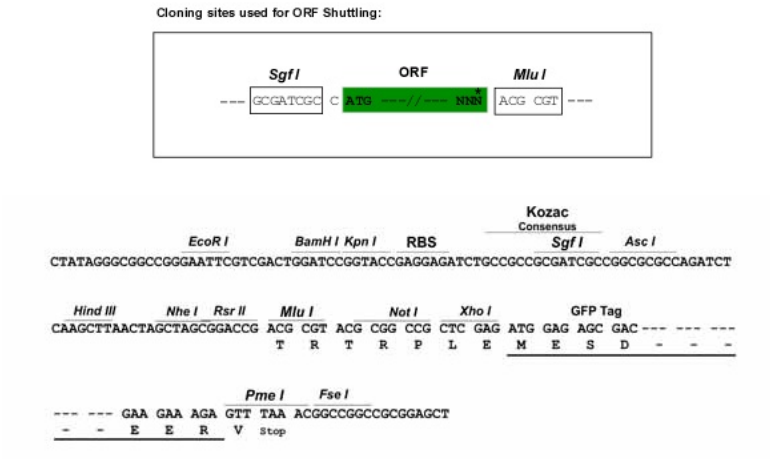
MAAIYGGVEGGGTRSEVLLVSEDGKILAEADGLSTNHWLIGTDKCVERINEMVNRAKRKAGVDPLVPLRS
LGLSLSGGDQEDAGRILIEELRDRFPYLSESYLITTDAAGSIATATPDGGVVLISGTGSNCRLINPDGSE
SGCGGWGHMMGDEGSAYWIAHQAVKIVFDSIDNLEAAPHDIGYVKQAMFHYFQVPDRLGILTHLYRDFDK
CRFAGFCRKIAEGAQQGDPLSRYIFRKAGEMLGRHIVAVLPEIDPVLFQGKIGLPILCVGSVWKSWELLK
EGFLLALTQGREIQAQNFFSSFTLMKLRHSSALGGASLGARHIGHLLPMDYSANAIAFYSYTFS

TRTRPLE - GFP Tag - V

**Chromatograms:** https://cdn.origene.com/chromatograms/ja2126_b06.zip

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**




**ACCN:** NM_017567

**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:** NM_017567.2, NP_060037.2

**RefSeq Size:** 1535 bp

**RefSeq ORF:** 1035 bp

**Locus ID:** 55577

**UniProt ID:** Q9UJ70

**Cytogenetics:** 2p13.3

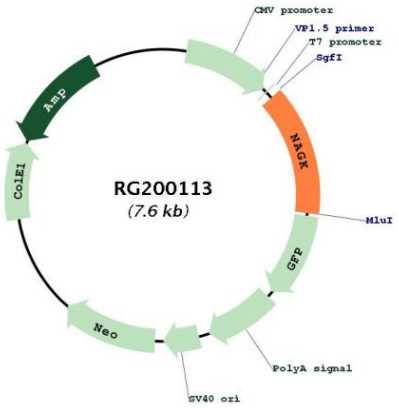
**Domains:** BcrAD_BadFG

**Protein Families:** Druggable Genome

**Protein Pathways:** Amino sugar and nucleotide sugar metabolism

**Gene Summary:** This gene encodes a member of the N-acetylhexosamine kinase family. The encoded protein catalyzes the conversion of N-acetyl-D-glucosamine to N-acetyl-D-glucosamine 6-phosphate, and is the major mammalian enzyme which recovers amino sugars. [provided by RefSeq, Nov 2011]

## Product images:




Circular map for RG200113