

## Product datasheet for **MR204344**

### Gnptg (NM\_172529) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Gnptg (NM_172529) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gnptg
Synonyms:	6430527N14Rik; A830081F19; AU067667; AU067744; Mdcp1; Tce7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR204344 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCGGGGCGGCTGGCTGGCTTCTGATGTTGCTGGGGCTCGCGTCGCAGGGGCCCGCCGGCATGTG  
CCGGGAAGATGAAGGTGGTGGAGGAGCCTAACACATTCGGGCTGAATAACCCGTTCTTGCCCCAGGCAAG  
CCGCCTTCAGCCAAGAGAGAGCCTTCAGCTGTATCCGGGCCCTGCATCTTTCAGACTTGCTGGCAAG  
TGCTTTAGCCTAGTGGAGTCCACGTACAAGTATGAATTCTGCCCTTCCACAACGTACCCAGCAGGAGC  
AGACCTTCGGCTGGAATGCCTACAGCGGATCCTTGGCATCTGGCATGAGTGGGAAATCATCAACAATAC  
CTCAAGGGCATGTGGATGACTGATGGGACTCCTGCCACTCCCGGAGCCGGCAGAGCAAGTGGAGCTC  
ACCTGTGGAAAGATCAACCGACTGGCCACGTGTCTGAGCCAAGCACCTGTGTCTATGCATTGACATTTCG  
AGACCCCTCTTGTGGCCATCCCACTCTTGTAGTGTATCCAACCTCTGTGAGAGGCCCTGCAGCAGCG  
CTGGGACCAGGTGGAACAGGACCTGGCAGATGAACTGATCACACCACAGGGCTATGAGAAGTTGCTAAGG  
GTACTTTTGGAGGATGCTGGCTACTTAAAGTCCCAGGAGAAACCCATCCCAACCCAGCTGGCAGGAGGTT  
CCAAGGCCTGGGGCTTGAGACTCTGGACAACGTAGAAAAGGCACATGCAGAGCTGTACAGGAGGTACA  
AAGACTGACGAGTCTGCTGCAACAGCATGGAATCCCCCACTCAGCCCACAGAAACCCCACTCTCAG  
CACCTGGGTCAGCAGCTCCCATAGGTGCAATCGCAGCAGAGCATCTGCGGAGTGACCCAGGACTACGTG  
GGAACATCCTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR204344 protein sequence  
 Red=Cloning site Green=Tags(s)

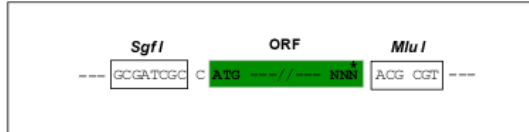
MAGRLAGFLMLLGLASQGPAPACAGKMKVVEEPNTFGLNPNFLPQASRLQPKREPSAVSGPLHLFRLAGK  
 CFSLVESTYKYEFCPFHNVTQHEQTFRWNAYSILGIWHEWEIINNTFKGMWMTDGDSDCHSRSRQSKVEL  
 TCGKINRLAHVSEPSTCVYALTFETPLVCHPHSLLVYPTLSEALQQRWDQVEQDLADELITPQGYEKLLR  
 VLFEDAGYLKVPGETHPTQLAGGSKGLGLETLDNCRKAHAELSQEVQRLTSLLLQHGPIHTQPTETTHSQ  
 HLGQQLPIGAIAAEHLRSDPGLRGNIL

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\_172529

**ORF Size:** 924 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\\_172529.2](#)

**RefSeq Size:** 1234 bp

**RefSeq ORF:** 924 bp

**Locus ID:** 214505

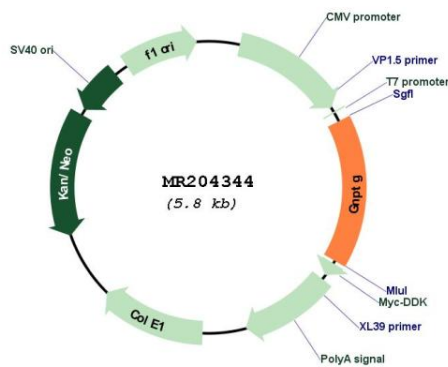
**UniProt ID:** [Q6S5C2](#)

**Cytogenetics:** 17 A3.3

**MW:** 34.1 kDa

**Gene Summary:** Non-catalytic subunit of the N-acetylglucosamine-1-phosphotransferase complex, an enzyme that catalyzes the formation of mannose 6-phosphate (M6P) markers on high mannose type oligosaccharides in the Golgi apparatus. Binds and presents the high mannose glycans of the acceptor to the catalytic alpha and beta subunits (GNPTAB). Enhances the rate of N-acetylglucosamine-1-phosphate transfer to the oligosaccharides of acid hydrolase acceptors. [UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR204344