

Product datasheet for **RR214376**

Gne (NM_053765) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gne (NM_053765) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Gne
Synonyms:	Uae1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR214376 representing NM_053765
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGAAGAACGGGAATAACCGGAAGCTTCGGGTTTGCCTTGCACCTGCAACCGAGCCGATTACTCCA
 AACTGGCCCCATCATGTTTCGGCATTAAAGACGGAGCCTGCGTTCTTCGAGCTCGACGTGGTGGTCTGGG
 CTCTCACCTGATCGACGACTACGAAACACATACCGCATGATTGAGCAGGACGACTTTGACATCAACACC
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 AGCTACCGGATGTCCTCAACCGCTGAAGCCTGACATCATGATTGTTACGGAGACCGATTTGACGCCCT
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR214376 representing NM_053765
 Red=Cloning site Green=Tags(s)

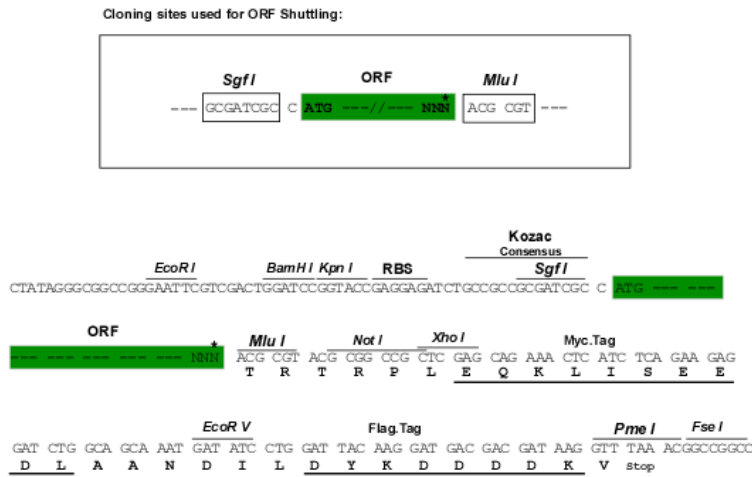
MEKNGNNRKL RVCVATCNRADYSKLAPIMFGIKTEPAFFELDVVVLGSHLIDDYGNTYRMIEQDDFDINT
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 TIDDSIRHAITKLAHYHVCCTRSAEQHLISMCEHDRIILAGCPSYDKLLSAKNKDYMSIIRMWLGDDVK
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 HVPFDQFIQLVAHAGCMIGNSSCGVREVGAFGTPVINLGRQIGRETGENVLHVRDADTQDKILQALHLQ
 FGKQYPCSKIYGDGNAVPRILKFLKSIDLQEPLQKFCFPVKENISQDIDHILETLSALAVDLGGTNLR
 VAIVSMKGEIVKKYTFNPKTYEERISLILQMCVEAAAEAVKLNCRILGVGISTGGRVNPQEGVVLHSTK
 LIQEWNSVDLRTPLSDTLHLVPVVDNDGNCAAMAERKFGQGKQENFVTLITGTGIGGGIIHQHELIHGS
 SFCAAELGHLVVSLDGPDCSCGSHGCIEAYASGMALQREAKKLHDEDLLEVEGMSVPKDEAVGALHLIQA
 AKLGNVKAQSILRTAGTALGLGVNLTHTMNPVILSGVLASHYIHIVRDVIRQQALSSVDVDVVVSD
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

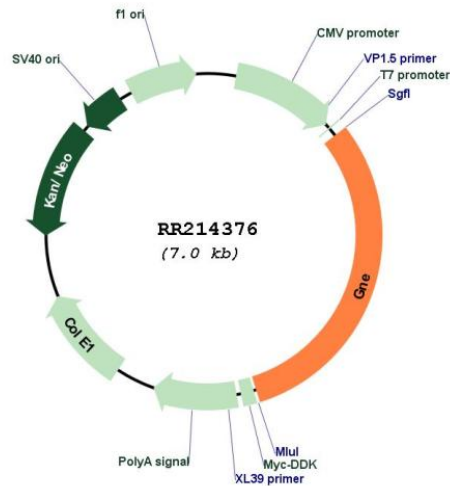
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_053765

ORF Size: 2166 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_053765.2](#), [NP_446217.1](#)

RefSeq Size: 2843 bp

RefSeq ORF: 2169 bp

Locus ID: 114711
UniProt ID: [O35826](#)
Cytogenetics: 5q22
MW: 79.2 kDa
Gene Summary: bifunctional enzyme, catalyzes the first two steps of biosynthesis of Neu5Ac (UDP-GlcNAc 2-epimerase and ManNAc kinase), precursor of sialic acids [RGD, Feb 2006]