

## Product datasheet for **RC231354**

### GLCNE (GNE) (NM\_001190383) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GLCNE (GNE) (NM_001190383) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GLCNE
Synonyms:	DMRV; GLCNE; IBM2; NM; Uae1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RC231354 representing NM\_001190383  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGAGAAGAATGAAAATAACCGAAAGCTGCGGGTTTGTGTTGCTACTTGTAAACCGTGCAGATTATTCTA  
AACTTGCCCCGATCATGTTTGGCATTAAAACCGAACCTGAGTTCTTTGAACTTGATGTTGTGGTACTTGG  
CTCTCACCTGATAGATGACTATGAAAATACATATCGAATGATTGAACAAGATGACTTTGACATTAACACC  
AGGCTACACACAATTGTGAGGGGAGAAGATGAGGCAGCCATGGTGGAGTCAGTAGGCCTGGCCCTAGTGA  
AGCTGCCAGATGTCCTTAATCGCCTGAAGCCTGATATCATGATTGTTTCATGGAGACAGGTTTGATGCCCT  
GGCTCTGGCCACATCTGCTGCCTTGATGAACATCCGAATCCTTCACATTGAAGGTGGGAAGTCACTGGG  
ACCATTGATGACTCTATCAGACATGCCATAACAAAAGCTGCTCATTATCATGTGTGCTGCACCCGAGTG  
CAGAGCAGCACCTGATATCCATGTGTGAGGACCATGATCGCATCCTTTTGGCAGGCTGCCCTTCTATGA  
CAAACCTCTCTCAGCCAAGAACAAGACTACATGAGCATATTTCGATGTGGCTAGGTGATGATGTA  
TCTAAAGATTACATTGTTGCACTACAGCACCTGTGACCACTGACATTAAGCATTCCATAAAAATGTTTG  
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GAGCAAAGAGATGGTTCGAGTGATGCGGAAGAAGGGCATTGAGCATCATCCCAACTTTCGTGCAGTTAAA  
CACGTCCCATTGACCAGTTTATACAGTTGGTTGCCCATGCTGGCTGTATGATTGGGAACAGCAGCTGTG  
GGGTTTCGAGAAGTTGGAGCTTTTGAACACCTGTGATCAACCTGGGAACACGTCAGATTGGAAGAGAAA  
AGGGGAGAATGTTCTTATGTCCGGATGCTGACCCCAAGACAAAATATTGCAAGCACTGCACCTTCAG  
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TTTGGGAGTAGGAATCGGTGGTGAATATCCATCAGCATGAATTGATCCACGGAAGCTCCTTCTGTGCT  
GCAGAAGTGGCCACCTTGTGTGCTCTGGATGGCCTGATTGTTCTGTGGAAGCCATGGGTGCATTG  
AAGCATACGCTCTGGAATGGCCTTGCAGAGGGAGGCAAAAAGCTCCATGATGAGGACCTGCTCTTGGT  
GGAAGGGATGTCAGTGCCAAAAGATGAGGCTGTGGGTGCGCTCCATCTCATCAAGCTGCGAAACTTGGC  
AATGCGAAGGCCAGAGCATCCTAAGAACAGCTGGAACAGCTTTGGGTCTGGGGTTGTGAACATCCTCC  
ATACCATGAATCCCTCCCTGTGATCCTCTCCGGAGTCCCTGGCCAGTCACTATATCCACATTGTCAAAGA  
CGTCATTGCGCAGCAGGCTTGTCTCCGTGCAGGACGTGGATGTGGTGGTTTCGGATTTGGTTGACCCC  
GCCCTGCTGGGTGCTGCCAGCATGGTTCTGGACTACACAACACGCAGGATCTAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC231354 representing NM\_001190383  
 Red=Cloning site Green=Tags(s)

```
MEKNGNRRKLKRVCVATCNRADYSKLAPIMFGIKTEPEFFELDVVVLGSHLIDDYGNTYRMIEQDDFDINT
RLHTIVRGEDEAMVESVGLALVKLPDVLNRLKPDIMIVHGDRFDALALATSAALMNIRILHIEGGEVSG
TIDDSIRHAITKLAHYHVCCTRSAEQHLISMCEDHDRILLAGCPSYDKLLSAKNDYMSIIRMWLGDDVK
SKDYIVALQHPVTTDIKHSIKMFELTDALISFNKRTLVLFPNIDAGSKEMVRVMRKKGIEHHPNFRAVK
HVPFDQFIQLVAHAGCMIGNSSCGVREVGAFGTPVINLGRQIGRETGENVLHVRDADTQDKILQALHLQ
FGKQYPCSKIYGDGNAVPRILKFLKSIDLQEPLQKKFCFPVKENISQDIDHILETLSALAVDLGGTNLR
VAIVSMKGEIVKKYTQFNPKTYEERINLILQMCVEAAAEAVKLNCRILGVGIGGGIIHQHELHGGSSFCA
AELGHLVVSLDGPDCSCGSHGCIEAYASGMALQREAKLHDEDLLLVEGMSVPKDEAVGALHLIQAAKLG
NAKAQSILRTAGTALGLGVVNILHTMNPVLVILSGVLASHYIHIKVDVIRQQALSSVQDQDVVVVSDLVDP
ALLGAASMVLDTTRRIY
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8071\\_d05.zip](https://cdn.origene.com/chromatograms/mk8071_d05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001190383

**ORF Size:** 1944 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\\_001190383.3](#)

**RefSeq ORF:** 1947 bp

**Locus ID:** 10020

**UniProt ID:** [Q9Y223](#)

**Cytogenetics:** 9p13.3

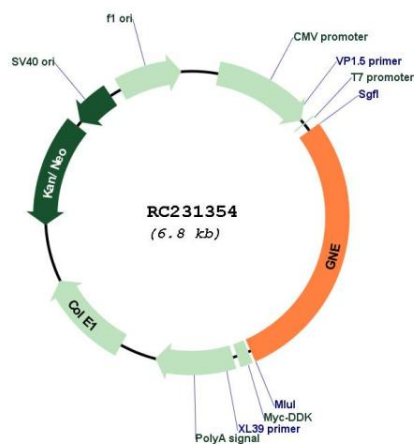
**Protein Families:** Druggable Genome

**Protein Pathways:** Amino sugar and nucleotide sugar metabolism, Metabolic pathways

**MW:** 71.7 kDa

**Gene Summary:** The protein encoded by this gene is a bifunctional enzyme that initiates and regulates the biosynthesis of N-acetylneuraminic acid (NeuAc), a precursor of sialic acids. It is a rate-limiting enzyme in the sialic acid biosynthetic pathway. Sialic acid modification of cell surface molecules is crucial for their function in many biologic processes, including cell adhesion and signal transduction. Differential sialylation of cell surface molecules is also implicated in the tumorigenicity and metastatic behavior of malignant cells. Mutations in this gene are associated with sialuria, autosomal recessive inclusion body myopathy, and Nonaka myopathy. Alternative splicing of this gene results in transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]

## Product images:



Circular map for RC231354