

Product datasheet for **RC226139**

GLCNE (GNE) (NM_001128227) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GLCNE (GNE) (NM_001128227) 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)



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ORF Nucleotide
Sequence:

>RC226139 representing NM_001128227
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAACCTATGGTTATCTGCAGAGGGAGTCATGCTTTCAAGGACCTCATGAACTCTATTTAAGAACC
 TCTCAAAACGAAACAAGCAAATCATGGAGAAGAATGGAATAAACCAGAAAGCTGCGGGTTTGTGTGCTAC
 TTGTAACCGTGCAGATTATTCTAAACTTGCCCCGATCATGTTTGGCATTAAAACCGAACCTGAGTCTTT
 GAACCTGATGTTGGTACTTGGCTCTCACCTGATAGATGACTATGGAATAACATATCGAATGATTGAAC
 AAGATGACTTTGACATTAACACCAGGCTACACACAATTGTGAGGGGAGAAGATGAGGCAGCCATGGTGA
 GTCAGTAGGCCTGGCCCTAGTGAAGCTGCCAGATGTCCTTAATCGCCTGAAGCCTGATATCATGATTGTT
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 TTGAAGGTGGGAAGTCAAGTGGGACCTTGTGACTCTATCAGACATGCCATAACAAAACGGCTCATT
 TCATGTGTGCTGCACCCGAGTGCAGAGCAGCACCTGATATCCATGTGTGAGGACCATGATCGCATCCTT
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 TGTGGCTAGGTGATGATGTAATACTAAAGATTACATTGTTGACTACAGCACCTGTGACCACTGACAT
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 ACGTGGATGTGGTGGTTTCGGATTTGGTTGACCCCGCCCTGCTGGGTGCTGCCAGCATGGTCTGGACTA
 CACAACACGCAGGATCTAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC226139 representing NM_001128227
 Red=Cloning site Green=Tags(s)

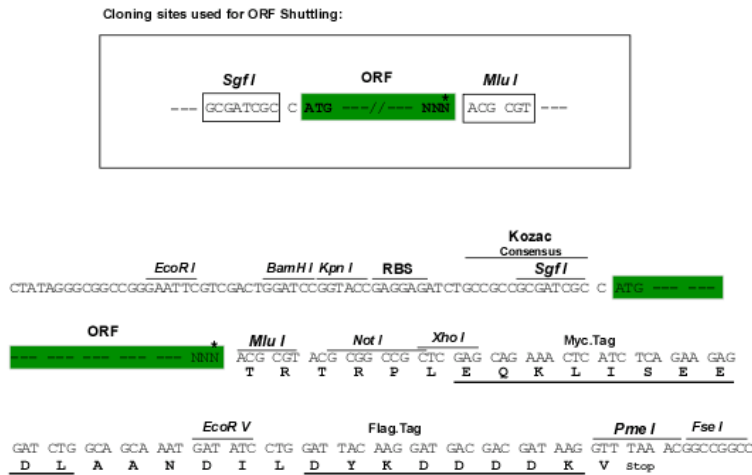
METYGYLQRESCFQGPHELYFKNLSKRNKQIMEKNGNNRKL RVCVATCNRADYSKLAPIMFGIKTEPEFF
 ELDVVVLGSHLIDDYGNTYRMIEQDDFDINTRLHTIVRGEDEAMVESVGLALVKLPDVLNRLKPDIMIV
 HGDRFDALALATSALMNIRILHIEGGEVSGTIDDSIRHAITKLAHYHVCCTRSAEQHLISMCDHDRIL
 LAGCPSYDKLLSAKNKDYMSIIRMWLGDDVYKSDYIVALQHPVTTDIKHSIKMFELTDALISFNKRTL
 LFPNIDAGSKEMVRVMRKKGIEHHPNFRAVKHVPFDQFIQLVAHAGCMIGNSSCGVREVGAFGTPVINLG
 TRQIGRETGENVLHVRDADTQDKILQALHLQFGKQYPCSKIYGDGNAVPRILKFLKSIDLQEPQKFCF
 PPVKENISQDIDHILETLSALAVDLGGTNLRVAIVSMKGEIVKKYTFNPKTYEERINLILQMCVEAAAE
 AVKLNCRILGVGISTGGRVNPREGIVLHSTKLIQEWNSVDLRTPLSDTLHLPVWVDNDGNCAALAEKFG
 QGKLENFVTLITGTGIGGGIIHQHEL IHGSSFCAAELGHLVVS LDGPDCCSGSHGCIEAYASGMALQRE
 AKKLHDEDL L L VEGMSVPKDEAVGALHLIQA AKLGNAAQSILRTAGTALGLGVVNILHTMNP SLVILSG
 VLASHYIHIVKDVIRQQALSSVQDVVVVSDLVDPALLGAASMLDYTTTRRIY

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_001128227

ORF Size: 2259 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001128227.3](#)

RefSeq Size: 5313 bp

RefSeq ORF: 2262 bp

Locus ID: 10020

UniProt ID: [Q9Y223](#)

Cytogenetics: 9p13.3

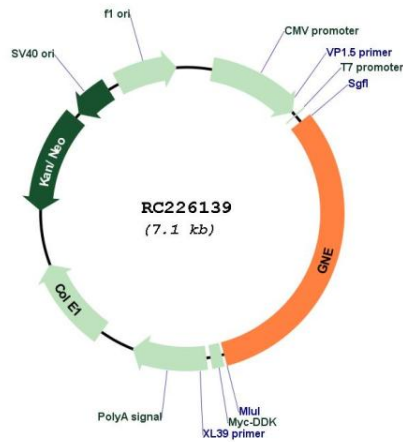
Protein Families: Druggable Genome

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

MW: 83.1 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 RC226139