

Product datasheet for **RC231391**

GLCNE (GNE) (NM_001190388) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GLCNE (GNE) (NM_001190388) 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:

>RC231391 representing NM_001190388
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGCCTATTGGTGACTGCTCCGTGGCAGCTAAACCAAGAAAACAGCTGCTCTGCTCATTATTTCAAACCA
 CACTAGGGTACAGAGCTCGTGCTTCGGGATGGAACCTATGGTTATCTGCAGAGGGAGTCATGCTTTCAA
 GGACCTCATAAATACATATCGAATGATTGAACAAGATGACTTTGACATTAAACACCAGGCTACACACAATT
 GTGAGGGGAGAAGATGAGGCAGCCATGGTGGAGTCAGTAGGCCTGGCCCTAGTGAAGCTGCCAGATGTCC
 TTAATCGCCTGAAGCCTGATATCATGATTGTTTCATGGAGACAGGTTTGATGCCCTGGCTCTGGCCACATC
 TGCTGCCCTTGATGAACATCCGAATCCTTCACATTGAAGGTGGGGAAGTCAGTGGGACCATTGATGACTCT
 ATCAGACATGCCATAACAAAACCTGGCTCATTATCATGTGTGCTGCACCCGAGTGCAGAGCAGCACCTGA
 TATCCATGTGTGAGGACCATGATCGCATCCTTTGGCAGGCTGCCCTTCCTATGACAAAATTCTCTCAGC
 CAAGAACAAGACTACATGAGCATCATTGCGATGTGGCTAGGTGATGATGTAATACTAAAGATTACATT
 GTTGCACTACAGCACCTGTGACCACTGACATTAAAGCATTCCATAAAAAATGTTTGAATTAACATTGGATG
 CACTTATCTCATTAAACAAGCGGACCCTAGTCCTGTTTCCAAATATTGACGCAGGGAGCAAAAGAGATGGT
 TCGAGTGATGCGGAAGAAGGGCATTGAGCATCATCCCACTTTCGTGCAGTTAAACACGTCCCATTTGAC
 CAGTTTATACAGTTGGTTGCCCATGCTGGCTGTATGATTGGGAACAGCAGCTGTGGGGTTTCGAGAAGTTG
 GAGCTTTTGAACACCTGTGATCAACCTGGGAACAGTCAGATTGGAAGAGAAAACAGGGGAGAATGTTCT
 TCATGTCCGGGATGCTGACACCCAAGACAAAATATTGCAAGCACTGCACCTTCAGTTTGGTAAACAGTAC
 CCTTGTCAAAGATATATGGGGATGGAATGCTGTTCCAAGGATTTTGAAGTTTCTCAAATCTATCGATC
 TCAAGAGCCACTGCAAAAAGAAATTCGCTTTCCTCCTGTGAAGGAGAATATCTCTCAAGATATTGACCA
 TATTCCTTGAAACTCTAAGTGCCTTGCCGTTGATCCTTGGCGGGACGAACCTCCGAGTTGCAATAGTCAGC
 ATGAAGGGTGAATAAGTTAAGAAGTATACTCAGTTCAATCCTAAAACTATGAAGAGAGGATTAATTTAA
 TCCTACAGATGTGTGGAAGCTGCAGCAGAAGCTGTA AAACTGAACTGCAGAATTTTGGGAGTAGGCAT
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 AACTCTGTGGACCTTAGGACCCCTTTCTGACACTTTGCATCTCCCTGTGTGGTAGACAATGATGGCA
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 AGGCACAGGAATCGTGGTGAATTATCCATCAGCATGAATTGATCCACGGAAGCTCCTTCTGTGCTGCA
 GAACTGGGCCACCTTGTGTCTCTGGATGGCCTGATTGTTCTGTGGAAGCCATGGGTGCATTGAAG
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 AGGGATGTCAGTGCCAAAAGATGAGGCTGTGGGTGCGCTCCATCTCATCCAAGCTGCGAAAATTTGGAAT
 GCGAAGGCCAGAGCATCCTAAGAACAGCTGGAACAGCTTTGGGTCTTGGGGTTGTGAACATCCTCCATA
 CCATGAATCCCTCCCTTGTGATCCTCTCCGGAGTCTGGCCAGTCACTATATCCACATTGTCAAAGACGT
 CATTGCCAGCAGGCCTTGTCTCCGTGCAGGACGTGGATGTGGTGGTTTCGGATTTGGTTGACCCCGCC
 CTGCTGGGTGCTGCCAGCATGGTCTGGACTACACAACACGCAGGATCTAC

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC231391 representing NM_001190388
 Red=Cloning site Green=Tags(s)

MPIGDCSVAAKPRKQLLCSLFQTTLGYRARASGWKPMVICRGSFAFKDLINTYRMIEQDDFDINTRLHTI
 VRGEDEAMVESVGLALVKLPDVLNRLKPDIMIVHGDRFDALALATSAALMNIRILHIEGGEVSGTIDDS
 IRHAITKLAHYHVCCTRSAEQHLISMCEHDHRIILAGCPSYDKLLSAKNKDYMSIIRMWLGDDVKSKDYI
 VALQHPVTTDIKHSIKMFELTDALISFNKRTLVLFPNIDAGSKEMVRVMRKKGIEHHPNFRAVKHVPFD
 QFIQLVAHAGCMIGNSSCGVREVGAFGTPVINLGTGTRQIGRETGENVLHVRDADTQDKILQALHLQFGKQY
 PCSKIYGDGNAVPRILKFLKSIDLQEPLQKKFCFPPVKENISQDIDHILETLSALAVDLGGTNLRVAIVS
 MKGEIVKKYTQFNPKTYEERINLILQMCVEAAAEAVKLNCRILGVGISTGGRVNPREGIVLHSTKLIQEW
 NSVDLRTPLSDTLHLVWVDNDGNCAALAEKFGQGKLENFVTLITGTGIGGGI IHQHEL IHGSSFCAA
 ELGHLVSLDGPDCSCGSHGCIEAYASGMALQREAKKLHDEDLLLVEGMSVPKDEAVGALHLIQAAKLGN
 AKAQSILRTAGTALGLGVNLTHTMNPVILSGVLASHYIHIVKDVIRQQALSSVQDQDQDQDQDQDQDQDQD
 LLGAASMLDYTRRIY

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001190388

ORF Size: 2151 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_001190388.1](#), [NP_001177317.1](#)

RefSeq ORF: 1992 bp

Locus ID: 10020

UniProt ID: [Q9Y223](#)

Cytogenetics: 9p13.3

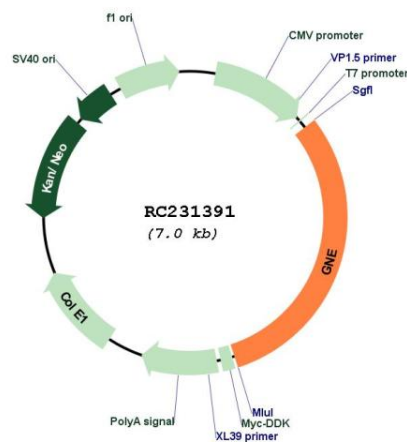
Protein Families: Druggable Genome

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

MW: 79 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 RC231391