

Product datasheet for **RG222626**

GLCNE (GNE) (NM_005476) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GLCNE (GNE) (NM_005476) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GLCNE
Synonyms:	DMRV; GLCNE; IBM2; NM; Uae1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG222626 representing NM_005476
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

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 CTCTCACCTGATAGATGACTATGAAAATACATATCGAATGATTGAACAAGATGACTTTGACATTAACACC
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 TTGGTTGACCCCGCCCTGCTGGGTGCTGCCAGCATGGTTCTGGACTACACAACACGCAGGATCTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG222626 representing NM_005476
Red=Cloning site Green=Tags(s)

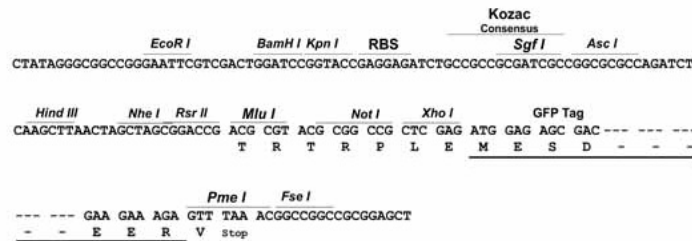
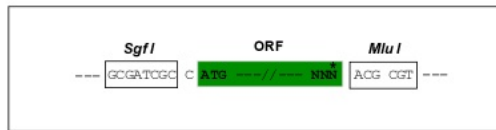
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MEKNGNNRKL RVCVATCN RADYSKLAPIMFGIKTEPEFFELDVVVLGSHLIDDYGNTYRMIEQDDFDINT
RLHTIVRGEDEAMVESVGLALVKLPDVLNRLKPDIMIVHGDRFDALALATSAALMNIRILHIEGGEVSG
TIDDSIRHAITKLAHYHVCCTRSAEQHLISMCEHDHRIILAGCPSYDKLLSAKNKDYMSIIRMWLGDDVK
SKDYIVALQHPVTTDIKHSIKMFELTDALISFNKRTLVLFPNIDAGSKEMVRVMRKKGIEHHPNFRAVK
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FGKQYPCSKIYGDGNAVPRILKFLKSIDLQEPLQKFCFPVKENISQDIDHILETLSALAVDLGGTNLR
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LIQEWNSVDLRTPLSDTLHLPVWVDNDGNCAALAEKFGQGKLENFVTLITGTGIGGGIIHQHELIHGS
SFCAAELGHLVVSLDGPDCSCGSHGCIEAYASGMALQREAKKLHDEDL L L VEGMSVPKDEAVGALHLIQA
AKLGNAKAQSILRTAGTALGLGVNILHTMNP SLVILSGVLASHYIHIVKDVI RQQALSSVDVDVVVSD
LVDPALLGAASMVLDYTTTRRIY
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_005476

ORF Size: 2166 bp

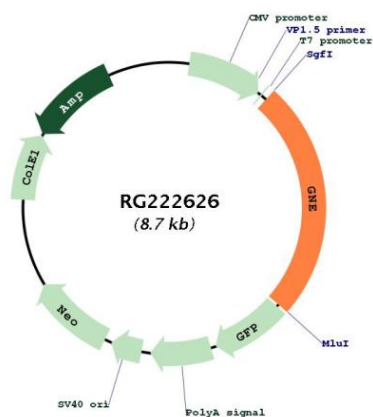
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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:	<ol style="list-style-type: none">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_005476.7
RefSeq Size:	3760 bp
RefSeq ORF:	2169 bp
Locus ID:	10020
UniProt ID:	Q9Y223
Cytogenetics:	9p13.3
Domains:	ROK, Epimerase_2
Protein Families:	Druggable Genome
Protein Pathways:	Amino sugar and nucleotide sugar metabolism, Metabolic pathways
Gene Summary:	<p>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]</p>

Product images:



Circular map for RG222626