

Product datasheet for **RC202043**

Glycogenin 2 (GYG2) (NM_001079855) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Glycogenin 2 (GYG2) (NM_001079855) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Glycogenin 2
Synonyms:	GN-2; GN2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC202043 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTCGGTGACTGATCAGGCTTTTGTCACTAGCCACCAATGACATCTACTGCCAGGGCGCCCTGGTCC
 TGGGGCAGTCACTGAGGAGACACAGGCTGACGAGGAAGCTGGTGGTGTGATCACTCCTCAGGTGTCCAG
 CCTGCTCAGGGTCATCCTCTCGAAGGTGTTGATGAAGTCATTGAAGTGAATCTAATCGATAGTGCCGAC
 TACATCCACCTGGCCTTTCTGAAGAGACCTGAGCTCGGGCTCACCTCACCAAGCTTCACTGTTGGACTC
 TCACTCACTACAGCAAGTGTGCTTCTGGATGCAGACTCTGGTGTGCTCCAATGTCGATGAGCTGTT
 TGACAGGGGAGAGTTTTCTGCGGCCCGGACCCCGGATGGCCGGATTGCTTCAATAGCGGGGTGTTGTC
 TTCAGCCTTCTCCACACGCATAAACTCCTGCTACAGCAGCCATGGAACACGGCAGCTTTGACGGGG
 CAGACCAAGGCTTACTGAATAGTTTCTCAGGAACTGGTCGACCACAGACATCCACAAGCACCTGCCGTT
 CATCTATAACTTGAGTAGTAACACGATGTACACTTACAGCCCTGCCTTCAAGCAATTCGGTTCAGTGCA
 AAGGTCGTCCTACTTTTGGGGTCCATGAACTTGAAGTACAAGTACAATCCACAGAGTGGCTCGGTGT
 TGGAGCAAGGCTCAGTGTCCAGCAGCCAGCACCAGGCGGCATTCTTTCATCTCTGGTGGACGGTCTACCA
 GAACAACGTGCTGCCCTTTATAAAAGCGTCCAAGCGGGGAAGCACGCGCTCTCTGGTCACTACTT
 TGCCCGAGTGTGTTGGGGGGCCGTGTGCGGATTCAGCCTCTGGTGTGGAGAGCCGTGTGAAAATTCAA
 CACCCAGTGGCGGCGTCCGTGTGCAAATTCACCACTGGGTTCTAACCAGCCTGCTCAGGGCCTTCGGGA
 GCCGACCCAGATAGTGGATGAGACCCTGTCCCTACCTGAAGGACGCCGTTCAGAAGATATGATAGCTTGT
 CCTGAAACTGAGACTCCTGCCGTGATAACGTGTGACCCACTGTCCAGCCTTCCCCTCAGCTGCAGACT
 TCACAGACTGAAACCATCTTGACCCAGCAAATAAAGTCAAAGTGTCTCATCCGAGGAAACCTTCGA
 ACCAAGCCAGGAACTCCCTGCTGAGGCTCTCAGGACCCAGTCTGCAGGATGCACTGGAGGTGACCTG
 GCCGTCTCTGTTCCAGATCTCCATCGAAGAGAAGGTGAAGGAATTGAGCCCGAGGAAGAGAGGAGGA
 AGTGGGAGGAAGGCCGTATCGACTACATGGGGAAGGACGCGTTTCTCGCATCCAGGAGAAGCTGGACCG
 GTTCTGCGAG

AG**GCGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC202043 protein sequence
 Red=Cloning site Green=Tags(s)

MSVTDQAFVTLATNDIYCQALVLGQSLRRHLTRKLVLLITPQVSSLLRVILSKVFDEVIEVNLIDSAD
 YIHLAFLKRPELGLTLTKLHCWTLTHYSKCVFLDADTLVLSNVDELFDGRGEFSAAPDPGWPDCFNQSGVVF
 FQPSLHTHKLLQLHAMEHGSFDGADQGLLNSFFRNWSTTDIHKHLPFIYNLSSNTMYTSPAFKQFGSSA
 KVVHFLGSMKPWNYKYNPQSGSVLEQGSVSSSQHQAFLHLWWTYQNNVLPYKSVQAGEARASPGHTL
 CRSDVGGPCADSASGVGEPENSTPSAGVPCANSPLGNSQPAQGLPEPTQIVDETLSPGRRSEDMIAC
 PETETPAVITCDPLSQSPQPADFTETETILQPANKVESVSSEETFEPSQELPAEALRDPQLDALEVDL
 AVSVSQISIEEKVKELSPPEERRKWEGRIDYMGKDAFARIQEKLDRLFQ

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

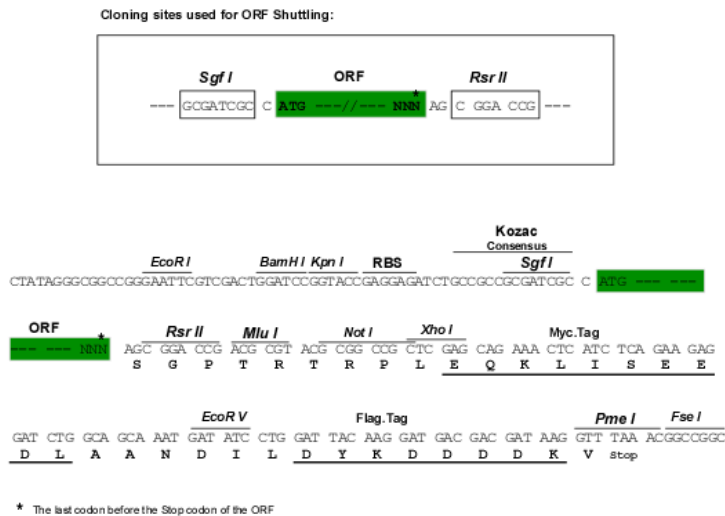
Chromatograms:

https://cdn.origene.com/chromatograms/mk6619_a10.zip

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:



ACCN: NM_001079855

ORF Size: 1410 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_001079855.1](#), [NP_001073324.1](#)

RefSeq Size: 3318 bp

RefSeq ORF: 1413 bp

Locus ID: 8908

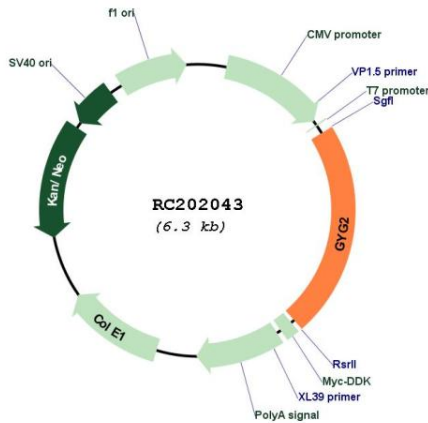
UniProt ID: [O15488](#)

Cytogenetics: Xp22.33

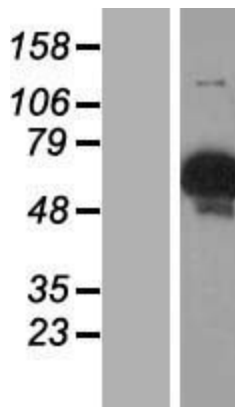
MW: 52 kDa

Gene Summary: This gene encodes a member of the the glycogenin family. Glycogenin is a self-glycosylating protein involved in the initiation reactions of glycogen biosynthesis. A gene on chromosome 3 encodes the muscle glycogenin and this X-linked gene encodes the glycogenin mainly present in liver; both are involved in blood glucose homeostasis. This gene has a short version on chromosome Y, which is 3' truncated and can not make a functional protein. Multiple alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, May 2010]

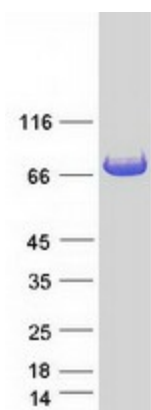
Product images:



Circular map for RC202043



Western blot validation of overexpression lysate (Cat# [LY421559]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202043 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GYG2 protein (Cat# [TP302043]). The protein was produced from HEK293T cells transfected with GYG2 cDNA clone (Cat# RC202043) using MegaTran 2.0 (Cat# [TT210002]).