

Product datasheet for **RC230068**

Glycogenin 2 (GYG2) (NM_001184703) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Glycogenin 2 (GYG2) (NM_001184703) 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)



[View online »](#)

ORF Nucleotide Sequence:

>RC230068 representing NM_001184703
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCGGAGACAGAGTTTCACCATGGTGCCAGGCTGGTCTCGAACTCCTGAGGTCAAGCAATTCACCCA
 CCTCAGCCTCCCAAAGTCTGGAATGACAGTGACTGATCAGGCTTTTGTACACTAGCCACCAATGACAT
 CTAAGTCCAGGGCGCCCTGGTCTGGGGCAGTCACTGAGGAGACACAGGCTGACGAGGAAGCTGGTGGTG
 TTGATCACTCCTCAGGTGTCCAGCCTGCTCAGGCTCATCTCTCGAAGGTGTTGATGAAGTCATTGAAG
 TGAATCTAATCGATAGTCCGACTACATCCACCTGGCCTTTCTGAAGAGACCTGAGCTCGGGCTCACCT
 CACCAAGCTTCACTGTTGGACTCTCACTACTACAGCAAGTGTCTTCTGGATGCAGACACTCTGGTG
 CTGTCCAATGTCGATGAGCTGTTTGACAGGGGAGAGTTTTCTGCGGCCCGGACCCGGATGGCCGGATT
 GCTTCAATAGCGGGTGTGTCTTCCAGCCTTCTCTCCACACGCATAAACTCCTGCTACAGCACGCCAT
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 GACATCCACAAGCACCTGCCGTTCTATAAATTGAGTAGTAACACGATGTACACTTACAGCCCTGCCCT
 TCAAGCAATTTCGGTTCAGTGCAAAGGTCGTCCACTTTTTGGGGTCCATGAAACCTTGGAATACAAGTA
 CAATCCACAGAGTGGCTCGGTGTTGGAGCAAGGCTCAGCGTCCAGCAGCCAGCACCAGGCGGCATTCCTT
 CATCTCTGGTGGACGGTCTACCAGAACAACGTGCTGCCCTTTATAAAAGCGTCCAAGCGGGGAAGCAC
 GCGCGTCTCCTGGTCACACACTTTGCCACAGTGTGTGGGGGGGCGGTGTGCGGATTACAGCTCTGGTGT
 TGGAGAGCCGTGTGAAAATTCAACACCCAGTGCAGGCGTGCCTGTGCAAATTCACCACTGGGTTCTAAC
 CAGCCTGCTCAGGGCCTCCGGAGCCGACCCAGATAGTGGATGAGACCCTGTCCCTACCTGAAGGACGCC
 GTTCAGAAGATGTCGACCTGGCGTCTCTGTTTCCAGATCTCCATCGAAGAGAAGGTGAAGGAATTGAG
 CCCCAGGAAGAGAGAGGAAGTGGGAGGAAGCCGTATCGACTACATGGGAAGGACGCGTTTGTCTCGC
 ATCCAGGAGAAGCTGGACCGTCTCTGCAG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC230068 representing NM_001184703
 Red=Cloning site Green=Tags(s)

MSETEFHHGAQAGLELLRSSNSPTSASQSAGMTVTDQAFVTLATNDIYCQALVLGQSLRRHRLTRKLVV
 LITPQVSSLLRVILSKVFDEIVIEVNLIDSADYIHLAFLKRPELGLTLTKLHCWTLTHYSKCVFLDADTLV
 LSNVDELFDGGEFSAAPDPGWPDGCFNSGVFVFQPSLHHLKLLQHAMEHGSFDGADQGLLSFFRNWSTT
 DIHKHLPFIYNLSSNTMYTYPFAKQFGSSAKVVHFLGSMKPWNYKYNPQSGSVLEQGSASSSQHQAFL
 HLWWTVYQNNVLPYKSVQAGEARASPGHTLCHSDVGGPCADSASGVGEPENSTPSAGVPCANSPLGSN
 QPAQGLPEPTQIVDETLSPGRRSEVDLAVSVSQISIEEKVKELSPREEERRKWEGRIDYMGKDAFAR
 IQEKLDRFLQ

SGPTRTRRL**EQKLI**SEEDLAANDILDYKDDDDKV

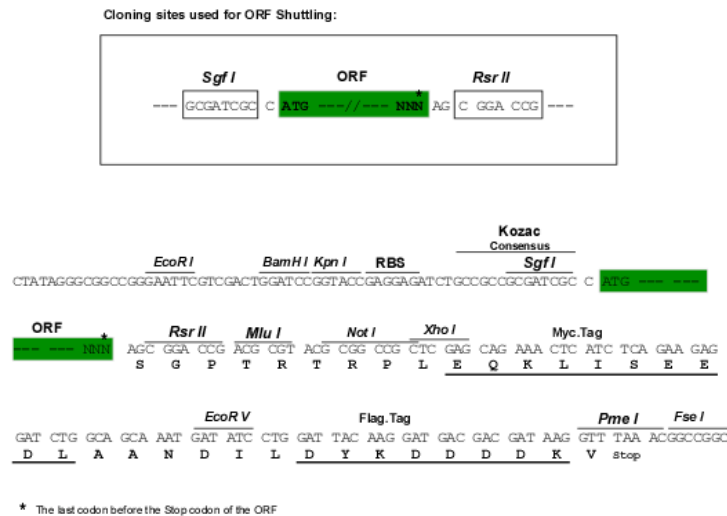
Chromatograms:

https://cdn.origene.com/chromatograms/mk8037_a05.zip

Restriction Sites:

Sgfl-RsrII

Cloning Scheme:



ACCN: NM_001184703

ORF Size: 1290 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001184703.1](#), [NP_001171632.1](#)

RefSeq ORF: 1293 bp

Locus ID: 8908

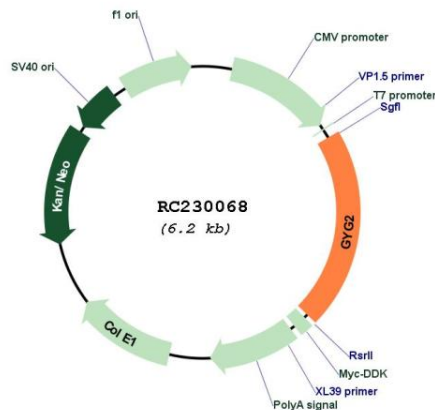
UniProt ID: [O15488](#)

Cytogenetics: Xp22.33

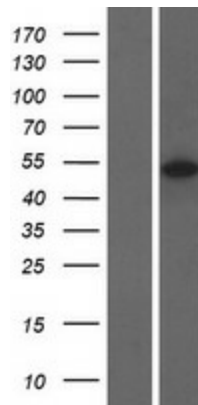
MW: 48 kDa

Gene Summary: This gene encodes a member of the the glycogenin family. Glycogenin is a self-glucosylating 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]

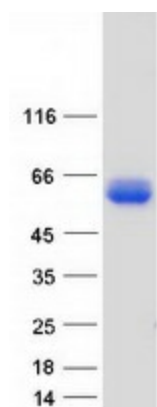
Product images:



Circular map for RC230068



Western blot validation of overexpression lysate (Cat# [LY433068]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC230068 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GYG2 protein (Cat# [TP330068]). The protein was produced from HEK293T cells transfected with GYG2 cDNA clone (Cat# RC230068) using MegaTran 2.0 (Cat# [TT210002]).