

## Product datasheet for **RC229901**

### Glycogenin 1 (GYG1) (NM\_001184720) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Glycogenin 1 (GYG1) (NM_001184720) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Glycogenin 1
Synonyms:	GSD15; GYG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC229901 representing NM_001184720 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGACAGATCAGGCCTTTGTGACACTAACCACAAACGATGCCTACGCCAAAGGTGCCCTGGTCTGGGAT  
CATCTCTGAAACAGCACAGGACCACCAGGAGGCTGGTCGTGCTCGCCACCCCTCAGGTCTCAGACTCCAT  
GAGAAAAGTTTTAGAGACAGTCTTTGATGAAGTCATCATGGTAGATGTCTGGACAGTGGCGATTCTGCT  
CATCTAACCTTAATGAAGAGGCCAGAGTTGGGTGTACGCTGACAAAGCTCCACTGCTGGTCGTTACAC  
AGTATTCAAATGTGTATTCATGGATGCAGATACTCTGGTCCTAGCAAATATTGATGATCTTTTTGACAG  
AGAAGAATTGTCAGCAGCACCAGACCCAGGGTGGCCTGACTGCTTCAATTCGGGAGTCTTCGTTTATCAG  
CCTTCAGTTGAAACATACAATCAGCTGTTGCATCTTGCTTCTGAGCAAGGTAGTTTTGATGGTGGGGACC  
AAGGCATACTGAACACATTTTTAGCAGCTGGGCAACAACAGATATCAGAAAACCTGCCGTTTATTTA  
TAACCTAAGCAGCATCTCTATACTCCTACCTCCCGCATTTAAAGTGTGGTGAAGTGCCAAAGTT  
GTGCATTTCTGGGACGAGTCAAACATGGAATTATACTTATGATCCAAAACAAAAGTGTCAAAGTG  
AGGCCATGATCCCAACATGACTCATCCAGAGTTTCTCATCTGTGGTGGAAACATCTTACCACCAACGT  
TTACCTCTGCTCAACAATTTGGCCTTGTCAAAGACCTGCTCATATGTAATGTGGAAGATGTCTCA  
GGAGCCATACATCTGTCCCTTGGGGAGATCCAGCTATGGCACAGCCGTTTGTATCCTCGGAAGAAC  
GGAAGGAACGATGGGAACAGGGCCAGGCTGATTATATGGGAGCAGATTCTTTGACAACATCAAGAGGAA  
ACTTGACACTTACCTCCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC229901 representing NM\_001184720  
Red=Cloning site Green=Tags(s)

MTDQAFVTLTTNDAYAKGALVLGSSLKQHRTTRRLVVLATPQVSDSMRKVLETVFDEVIMVDVLD SGDSA  
 HLTLMKRPELGVTLTKLHCWSLTQYSKCVFMDADTLVLANIDDLFDREELSAAPDPGWPCFN SGVFVYQ  
 PSVETYNQLLHLASEQGSFDGGDQGILNTFFSSWATDIRKHLPFIYNLSSISIYSYLP AFKVF GASAKV  
 VHFLGRVKPWNYTYDPKTKSVKSEAHPNMTHPEFLILWWNIFTTNVLP LLQQFGLVKDTC SYVNVEDVS  
 GAISHLSLGEIPAMAQPFVSSEERKERWEQGDADYMGADSF DN IKRKLDTYLQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1477\\_a10.zip](https://cdn.origene.com/chromatograms/ja1477_a10.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001184720

**ORF Size:** 999 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\\_001184720.1](#), [NP\\_001171649.1](#)

**RefSeq ORF:** 1002 bp

**Locus ID:** 2992

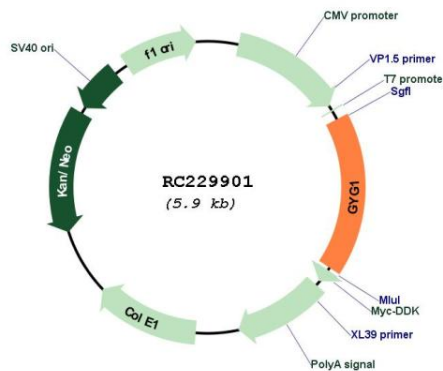
**UniProt ID:** [P46976](#)

**Cytogenetics:** 3q24

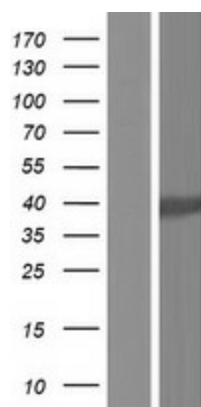
**MW:** 37.9 kDa

**Gene Summary:** This gene encodes a member of the glycogenin family. Glycogenin is a glycosyltransferase that catalyzes the formation of a short glucose polymer from uridine diphosphate glucose in an autoglucosylation reaction. This reaction is followed by elongation and branching of the polymer, catalyzed by glycogen synthase and branching enzyme, to form glycogen. This gene is expressed in muscle and other tissues. Mutations in this gene result in glycogen storage disease XV. This gene has pseudogenes on chromosomes 1, 8 and 13 respectively. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Sep 2010]

**Product images:**



Circular map for RC229901



Western blot validation of overexpression lysate (Cat# [LY432901]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229901 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).