

## Product datasheet for **SC328539**

### Glycogenin 1 (GYG1) (NM\_001184720) Human Untagged Clone

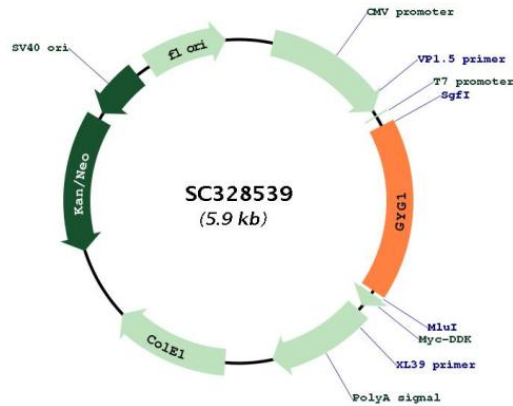
#### Product data:

Product Type:	Expression Plasmids
Product Name:	Glycogenin 1 (GYG1) (NM_001184720) Human Untagged Clone
Tag:	Tag Free
Symbol:	GYG1
Synonyms:	GSD15; GYG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC328539 representing NM_001184720. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTGTGAAACCGTCAGAATTTTGTAAACGACTACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGACAGATCAGGCCTTTGTGACACTAACCACAAACGATGCCTACGCCAAAGGTGCCCTGGTCTGGGA
TCATCTCTGAAACAGCACAGGACCACCAGGAGGCTGGTCGTGCTCGCCACCCCTCAGGTCTCAGACTCC
ATGAGAAAAGTTTTAGAGACAGTCTTTGATGAAGTCATCATGGTAGATGTCTTGGACAGTGGCGATTCT
GCTCATCTAACCTTAATGAAGAGGCCAGAGTTGGGTGTCACGCTGACAAAGCTCCACTGCTGGTCGCTT
ACACAGTATTCAAAATGTGTATTCATGGATGCAGATACTCTGGTCTAGCAAATATTGATGATCTTTTT
GACAGAGAAGAATTGTCAGCAGCACCAGACCCAGGGTGGCCTGACTGCTTCAATTCGGAGTCTTCGTT
TATCAGCCTTCAGTTGAAACATACAATCAGCTGTTGCATCTTGCTTCTGAGCAAGGTAGTTTTGATGGT
GGGACCAAGGCATACTGAACACATTTTTTAGCAGCTGGGCAACAACAGATATCAGAAAACCTGCCG
TTTATTTATAACCTAAGCAGCATCTCTATACTCCTACCTCCCGGCATTTAAAGTGTGGTGCAAGT
GCCAAAGTTGTGCATTTCTGGGACGAGTCAAACCATGGAATTATACTTATGATCCCAAAACAAAAGT
GTCAAAGTGAGGCCATGATCCCAACATGACTCATCCAGAGTTTCTCATCTGTGGTGGAAACATCTTT
ACCACCAACGTTTTACCTCTGCTTCAACAATTTGGCCTTGCAAGACACCTGCTCATATGTAATGTG
GAAGATGTCTCAGGAGCCATATCACATCTGTCCCTTGGGAGATCCCAGCTATGGCACAGCCGTTTGT
TCCTCGGAAGAACGGAAGGAACGATGGGAACAGGGCCAGGCTGATTATATGGGAGCAGATTCTTTGAC
AACATCAAGAGGAAACTTGACACTTACCTCCAGTAG
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: SgfI-MluI



**Plasmid Map:**


**ACCN:** NM\_001184720

**Insert Size:** 1002 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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](#)

**RefSeq Size:** 2000 bp

**RefSeq ORF:** 1002 bp

**Locus ID:** 2992

UniProt ID: [P46976](#)

Cytogenetics: 3q24

MW: 37.5 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]  
Transcript Variant: This variant (2) lacks an in-frame exon in the 3' CDS, as compared to variant 1. The resulting isoform (2) lacks an internal segment in the C-terminal region, as compared to isoform 1.