

## Product datasheet for **SC118381**

### **PYGL (NM\_002863) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PYGL (NM_002863) Human Untagged Clone
Tag:	Tag Free
Symbol:	PYGL
Synonyms:	GSD6
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene ORF within SC118381 sequence for NM\_002863 edited (data generated by NextGen Sequencing)

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ATGGCGAAGCCCCTGACGGACCAGGAGAAGCGCGGCAGATCAGCATCCGCGGCATCGTG
GGCGTGGAGAACGTGGCAGAGCTGAAGAAGAGTTTCAACCGGCACCTGCACCTTACAGCTG
GTCAAGGACCACAACGTGGCCACCACCCGCGACTACTACTTCGCGCTGGCGCACACGGTG
CGCGACCACCTGGTGGGCGCTGGATCCGCACGCAGCAGCACTACTACGACAAGTGCCTCC
AAGAGGGTATATTACCTCTCTCTGGAATTTTACATGGGCCGAACATTACAGAACCACCATG
ATCAACCTCGGTCTGCAAAATGCCTGTGATGAGGCCATTTACCAGCTTGGATTGGATATA
GAAGAGTTAGAAGAAATTGAAGAAGATGCTGGACTTGGCAATGGTGGTCTTGGGAGACTT
GCTGCCTGCTTCTTGGATTCCATGGCAACCCTGGGACTTGCAGCCTATGGATACGGCATT
CGGTATGAATATGGGATTTTCAATCAGAAGATCCGAGATGGATGGCAGGTAGAAGAAGCA
GATGATTGGCTCAGATATGAAAACCTTGGGAGAAGTCCCGCCAGAATTCATGCTGCCT
GTGCACCTCTATGAAAAGTAGAACACACCAACACCGGGACCAAGTGGATTGACACTCAA
GTGGTCTGGCTCTGCCATATGACACCCCGTGGCCGGCTACATGAATAACACTGTCAAC
ACCATGCGCCTCTGGTCTGCTCGGGACCAAATGACTTTAACCTCAGAGACTTTAATGTT
GGAGACTACATTCAGGCTGTGCTGGACCGAAACCTGGCCGAGAACATCTCCCGGGTCCCTC
TATCCCAATGACAATTTTTTTGAAGGGAAGGAGCTAAGATTGAAGCAGGAATACTTTGTG
GTGGTGCACCTTGAAGATATCATCCGCCGTTTCAAAGCCTCCAAGTTTGGTCCACC
CGTGGTGCAGGAAGTGTGTTTGTGATGCCTTCCCGGATCAGGTGGCCATCCAGCTGAATGAT
ACTCACCTGCACTCGCGATCCCTGAGCTGATGAGGATTTTTGTGGATATTGAAAACTG
CCCTGGTCCAAGGCATGGGAGCTCACCCAGAAGACCTTCGCCTACACCAACCACACAGTG
CTCCCGGAAGCCCTGGAGCGCTGGCCCGTGGACCTGGTGGAGAAGCTGCTCCCTCGACAT
TTGGAAATCATTATGAGATAAATCAGAAGCATTAGATAGAATTGTGGCCTTGTTCCT
AAAGATGTGGACCGTCTGAGAAGGATGTCTCTGATAGAAGAGGAAGGAAGCAAAAGGATC
AACATGGCCCATCTCTGATTGTCGGTCCCATGCTGTGAATGGCGTGGCTAAAAATCCAC
TCAGACATCGTGAAGACTAAAGTATTCAAGGACTTCAGTGAGCTAGAACCCTGACAAGTTT
CAGAATAAAACCAATGGGATCACTCCAAGGCGCTGGCTCCTACTCTGCAACCCAGGACTT
GCAGAGCTCATAGCAGAGAAAATTGGAGAAGACTATGTGAAAGACCTGAGCCAGCTGACG
AAGCTCCACAGCTTCTGGGTGATGATGTCTTCCCTCCGGAACTCGCCAAGGTGAAGCAG
GAGAATAAGCTGAAGTTTTCTCAGTTCTGGAGACGGAGTACAAAGTGAAGATCAACCCA
TCCTCCATGTTTGTGATGTCCAGGTGAAGAGGATACATGAGTACAAGCGACAGCTCTTGAAC
TGTCTGCATGTGATCACGATGTACAACCGCATTAAAGAAAGACCCTAAGAAGTTATTCGTG
CCAAGGACAGTTATCATTGGTGGTAAAGCTGCCCCAGGATATCACATGGCCAAAATGATC
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TTGAAAGTCATCTTCTGGAGAAGTACAGAGTATCTCTTGTGAAAAAGTCATTCCAGCC
ACAGATCTGTCAGAGCAGATTTCCACTGCAGGCACCGAAGCCTCGGGGACAGGCAATATG
AAGTTCATGCTAAATGGGGCCCTAACTATCGGGACCATGGATGGGGCCAATGTGGAAATG
GCAGAAGAAGCTGGGGAAGAGAACCCTGTTTCATCTTTGGCATGAGGATAGATGATGGCT
GCTTTGGACAAGAAAGGGTACGAGGCAAAAGAATACTATGAGGCACCTCCAGAGCTGAAG
CTGGTCATTGATCAAATTGACAATGGCTTTTTTTCTCCCAAGCAGCCTGACCTCTTCAAA
GATATCATCAACATGCTATTTTATCATGACAGGTTTAAAGTCTTTGCAGACTACGAAGCC
TATGTCAAGTGTCAAGATAAAGTGAAGTCAAGTGTACATGAATCCAAAGGCTGGAACACA
ATGGTACTCAAAAACATAGCTGCCTCGGGGAAATTTCTCCAGTGACCGAACAATTAAGAA
TATGCCAAAACATCTGGAACGTGGAACCTTCAGATCTAAAGATTTCTCTATCCAATGAA
TCTAACAAAGTCAATGGAATTGA
    
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Clone variation with respect to NM\_002863.4  
 1020 c=>t

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_002863 unedited  
 AATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCGGCAGCCAGCGCCTCCG  
 GCCGCACTTCCAGCTCTCTGCGCAGCCCGCCGCGCAGCCCGCCGCCCCAGCCATGGCGAA  
 GCCCCTGACGGACCAGGAGAAGCGGGCGGCAGATCAGCATCCGCGGCATCGTGGGCGTGA  
 GAACGTGGCAGAGCTGAAGAAGAGTTTCAACCGGCACCTGCACCTCACGCTGGTCAAGGA  
 CCGCAACGTGGCCACCACCCGCGACTACTACTTCGCGCTGGCGCACACGGTGCAGGACCA  
 CCTGGTGGGCGCTGGATCCGACGCAGCAGCACTACTACGACAAGTGCCCAAGAGGGT  
 ATATTACCTCTCTGGAATTTTACATGGGCCGAACATTACAGAACCACCATGATCAACCT  
 CGTCTGCAAAATGCCTGTGATGAGGCCATTTACCAGCTTGGATTGGATATAGAAGATT  
 AGAAGAAATTGAAGAAGATGCTGGACTTGGCAATGGTGGTCTTGGGAGACTTGTGCCTG  
 CTTCTGGATTCCATGGCAACCCGNGACTTGCAGCCTATGGATACGGCATTTCGGTATGA  
 ATATGGGATTTTCAATCAGAAGATCCGAGATGGATGGCAGGTAGAAGAAGCAGATGATTG  
 GCTCAGATATGAAAACCCCTGGGAGAAGTCCCGCCAGAATTCATGCTGCCTGTGCACTT  
 CTNATGAAAAGTAGAACACCAACACCCGACCAAGTATTGACACTCAAGTGGTCTCGG  
 CTCTGCATATGACCCCGTGGCGGCTACATGATACACTGTCACACCTGCCCTCTGTCTG  
 CTCGGCACCAATGACTTTACCTANAACCTTATGTTGAGACTCATCCAGCTGGCTGACCGA  
 ACCTGCCGAGACTNCCGGTCT

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_002863 unedited  
 CTATGGACCGGCCGCCGATTCTNANGATNCGNAGTTTTCTTTCTTTTTCTTTTTTCT  
 TTAGACCCTTGGAAAATTGACACTTTATTTTTAAGCTCTATTACATATAATTTCCCTCCC  
 CATTCCCAGAGATACTCAACTATTATAGATTATTAGCTAACAAAACAAAACAGTGAAT  
 GTTGTA AAAATGTTCAAGTTCAGTAAGAAGCTATGTTTTCTAGAGACATTGTAGAGTTCA  
 ATTTCCATTGACTTTGTTAGATTCAATTGGATAGAGAAATCTTTAGATCTGAAGTTCCAC  
 GTTCCAGATGTTTTGGGCATATTCTTTAATTGTTTCGGTCACTGGAGAATTTCCCGAGGC  
 AGCTATGTTTTGAGTACCATTGTGTTCCAGGCCTTTGGATTCAATGTACAGCTGACTCAC  
 TTTATCTTGACTTTGACATAGGCTTCGTAGTCTGCAAAGACTTTAAACCTGTATGATA  
 AAATAGCATGTTGATGATATCTTTGAAGAGGTCAGGCTGCTTGGGAGAAAAAAGCCATT  
 GTCAATTTGATCAATGACCAGCTTCAGCTCTGGAAGTGCCTCATAGTATTCTTTTGCCTC  
 GTACCTTTCTTGTCAAAGCAGCCACATCATCTATCCTCATGCCAAAGATGAACAGGTT  
 CTCTTCCCAGCTTCTTCTGCCATTTCCACATTGGCCCCATCCATGGTCCCGATAGTTAG  
 GGCCCCATTTAGCATGAACCTTCAATTGCCTGTCCCCGAGGCTTCGGTGCCTGCAGTGA  
 AATCTGCTCTGACAGATCTGTGGCTGGAATGACCTTTTCAGCAAGAGAAGTCTGTAGTTC  
 TCCAAGAGATGACTTTCAACTTGCCTCCACCATAGGGTCATTGNTACCACATCTGCCACT  
 GAGTGATAGCTTTAGATCATTGCTGC

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_002863

**Insert Size:**

2950 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).

**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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_002863.3</a> , <a href="#">NP_002854.3</a>
<b>RefSeq Size:</b>	2830 bp
<b>RefSeq ORF:</b>	2544 bp
<b>Locus ID:</b>	5836
<b>UniProt ID:</b>	<a href="#">P06737</a>
<b>Cytogenetics:</b>	14q22.1
<b>Domains:</b>	phosphorylase
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Insulin signaling pathway, Starch and sucrose metabolism
<b>Gene Summary:</b>	<p>This gene encodes a homodimeric protein that catalyses the cleavage of alpha-1,4-glycosidic bonds to release glucose-1-phosphate from liver glycogen stores. This protein switches from inactive phosphorylase B to active phosphorylase A by phosphorylation of serine residue 15. Activity of this enzyme is further regulated by multiple allosteric effectors and hormonal controls. Humans have three glycogen phosphorylase genes that encode distinct isozymes that are primarily expressed in liver, brain and muscle, respectively. The liver isozyme serves the glycemic demands of the body in general while the brain and muscle isozymes supply just those tissues. In glycogen storage disease type VI, also known as Hers disease, mutations in liver glycogen phosphorylase inhibit the conversion of glycogen to glucose and results in moderate hypoglycemia, mild ketosis, growth retardation and hepatomegaly. Alternative splicing results in multiple transcript variants encoding different isoforms.[provided by RefSeq, Feb 2011]</p> <p>Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).</p>