

Product datasheet for SC328587

PGM1 (NM_001172819) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: PGM1 (NM_001172819) Human Untagged Clone

Tag: Tag Free Symbol: PGM1

Synonyms: CDG1T; GSD14

Mammalian Cell None

Selection:

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >NCBI ORF sequence for NM_001172819, the custom clone sequence may differ by one or

more nucleotides

ATGCTGAGAAGCATCTTTGATTTCAGTGCACTGAAAGAACTACTTTCTGGGCCAAACCGA CTGAAGATCCGTATTGATGCTATGCATGGAGTTGTGGGACCGTATGTAAAGAAGATCCTC TGTGAAGAACTCGGTGCCCCTGCGAACTCGGCAGTTAACTGCGTTCCTCTGGAGGACTTT GGAGGCCACCACCTGACCCCAACCTCACCTATGCAGCTGACCTGGTGGAGACCATGAAG TCAGGAGAGCATGATTTTGGGGCTGCCTTTGATGGAGATGGGGATCGAAACATGATTCTG GGCAAGCATGGGTTCTTTGTGAACCCTTCAGACTCTGTGGCTGTCATTGCTGCCAACATC TTCAGCATTCCGTATTTCCAGCAGACTGGGGTCCGCGGCTTTGCACGGAGCATGCCCACG AGTGGTGCTCTGGACCGGGTGGCTAGTGCTACAAAGATTGCTTTGTATGAGACCCCAACT GGCTGGAAGTTTTTTGGGAATTTGATGGACGCGAGCAAACTGTCCCTTTGTGGGGAGGAG AGCTTCGGGACCGGTTCTGACCACATCCGTGAGAAAGATGGACTGTGGGCTGTCCTTGCC TGGCTCTCCATCCTAGCCACCCGCAAGCAGAGTGTGGAGGACATTCTCAAAGATCATTGG CAAAAGTATGGCCGGAATTTCTTCACCAGGTATGATTACGAGGAGGTGGAAGCTGAGGGC GCAAACAAAATGATGAAGGACTTGGAGGCCCTGATGTTTGATCGCTCCTTTGTGGGGAAG CAGTTCTCAGCAAATGACAAAGTTTACACTGTGGAGAAGGCCGATAACTTTGAATACAGC GACCCAGTGGATGGAAGCATTTCAAGAAATCAGGGCTTGCGCCTCATTTTCACAGATGGT TCTCGAATCGTCTTCCGACTGAGCGGCACTGGGAGTGCCGGGGCCACCATTCGGCTGTAC ATCGATAGCTATGAGAAGGACGTTGCCAAGATTAACCAGGACCCCCAGGTCATGTTGGCC

CCCACTGTCATCACCTAA

Restriction Sites: Please inquire **ACCN:** NM 001172819



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PGM1 (NM_001172819) Human Untagged Clone - SC328587

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 001172819.1, NP 001166290.1

1p31.3

RefSeq Size: 2364 bp RefSeq ORF: 1098 bp 5236 Locus ID: **UniProt ID:** P36871

Cytogenetics:

Protein Pathways: Amino sugar and nucleotide sugar metabolism, Galactose metabolism, Glycolysis /

Gluconeogenesis, Metabolic pathways, Pentose phosphate pathway, Starch and sucrose

metabolism

The protein encoded by this gene is an isozyme of phosphoglucomutase (PGM) and belongs **Gene Summary:**

> to the phosphohexose mutase family. There are several PGM isozymes, which are encoded by different genes and catalyze the transfer of phosphate between the 1 and 6 positions of glucose. In most cell types, this PGM isozyme is predominant, representing about 90% of total

PGM activity. In red cells, PGM2 is a major isozyme. This gene is highly polymorphic.

Mutations in this gene cause glycogen storage disease type 14. Alternativley spliced transcript variants encoding different isoforms have been identified in this gene.[provided by RefSeq,

Mar 2010]

Transcript Variant: This variant (3) has an alternate 5' exon, which results in a downstream AUG start codon, as compared to variant 1. The resulting isoform (3) is shorter at the N-

terminus, as compared to isoform 1.