

Product datasheet for MC225958

G6pc2 (NM 001289857) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: G6pc2 (NM_001289857) Mouse Untagged Clone

Tag: Tag Free Symbol: G6pc2

Synonyms:G6pc; G6pc-rs; I; IGRPVector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

Fully Sequenced ORF: >MC225958 representing NM_001289857

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

TCCTCTGTCACTCTGCACAGGGATGCTAGTAGCCGAGGCCTTTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-Mlul

ACCN: NM 001289857

Insert Size: 465 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).



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



OTI Annotation: Clone contains native stop codon, and expresses the complete ORF without any c-terminal

tag.

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: <u>NM 001289857.1</u>, <u>NP 001276786.1</u>

 RefSeq Size:
 1950 bp

 RefSeq ORF:
 465 bp

 Locus ID:
 14378

 UniProt ID:
 Q9Z186

 Cytogenetics:
 2 39.66 cM

Gene Summary: This gene encodes an enzyme that belongs to the glucose-6-phosphatase catalytic subunit

family. Members of this family catalyze the hydrolysis of glucose-6-phosphate, the terminal step in gluconeogenic and glycogenolytic pathways, to release glucose into the bloodstream. The family member encoded by this gene is found specifically in pancreatic islets but has not been shown to have phosphotransferase or phosphatase activity exhibited by a similar liver enzyme. The non-obese diabetic (NOD) mouse is a model for human type 1 diabetes, an autoimmune disease in which T lymphocytes attack and destroy insulin-producing pancreatic beta cells. In NOD mice, the protein encoded by this gene is a major target of cell-mediated autoimmunity. Variations in the human and mouse genes are associated with lower fasting plasma glucose levels. Alternative splicing results in multiple transcript variants. [provided by

RefSeg, Jan 2014]

Transcript Variant: This variant (3) differs in the 3' UTR and lacks an alternate exon in the coding region resulting in a frameshift and an early stop codon compared to variant 1. The

encoded isoform (3) has a distinct C-terminus and is shorter than isoform 1.