

Product datasheet for MC226500

G6pc2 (NM_001289856) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	G6pc2 (NM_001289856) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	G6pc2
Synonyms:	G6pc; G6pc-rs; I; IGRP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC226500 representing NM_001289856 Red=Cloning site Blue=ORF Orange=Stop codon

TTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGGCTCATCGTGGTCTGGTATGTCATGGTAACAGCTGCCCTAAGCTACACCATCAGCCGGATGGAGG
AGTCCTCTGTCACTCTGCACAGACTGACCTGGTCTTTCTGTGGAGTGTTTTCTGGTTGATTCAAATCAG
CGTCTGCATCTCAAGAGTATTCATAGCCACACATTTCCCCATCAGGTCATTCTTGGAGTGATTGGTGGG
ATGCTAGTAGCCGAGGCCTTTGAACACACTCCAGGAGTCCACATGGCCAGCTTGAGTGTGTACCTGAAGA
CCAACGCTTCTCTTCTGTTGCCCTCGGCTTTTACCTGCTTCTCCGACTGTTCCGTATTGACCTGCT
GTGGTCCGTGCCATCGCCAAAAAGTGGTGTGCCAACCCAGACTGGATCCACATTGACAGCACGCCTTTT
GCTGGACTCGTGAGAAACCTCGGGTCTCTTTGGCTTGGGTTTCGCCATCAACTCAGAAATGTTCTTC
GGAGCTGCCAGGGAGAAAATGGCACAAGCCGAGCTTCCGCTTGCTCTGTGCTCTGACCTCACTGACCAC
AATGCAACTTTATCGCTTCATCAAGATCCCGACTCACGCGGAACCTTTATTTTACCTGTTGTCTTTCTGT
AAAAGTGCCTCCATCCCCCTGATGGTGGTGGCTCTAATTCCTACTGTGTACATATGTTAATGAGACCCG
GTGACAAGAAGACTAAA**TAG**

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	SgfI-MluI
ACCN:	NM_001289856
Insert Size:	720 bp


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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:	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:	<ol style="list-style-type: none"> 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001289856.1, NP_001276785.1</u>
RefSeq Size:	1846 bp
RefSeq ORF:	720 bp
Locus ID:	14378
UniProt ID:	<u>Q9Z186</u>
Cytogenetics:	2 39.66 cM
Gene Summary:	<p>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 RefSeq, Jan 2014]</p> <p>Transcript Variant: This variant (2) contains an alternate 5' terminal exon, lacks a portion of the 5' coding region and initiates translation at a downstream start codon compared to variant 1. The encoded isoform (2) has a shorter N-terminus compared to isoform 1.</p>