

Product datasheet for RC223506

G6PC2 (NM_001081686) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: G6PC2 (NM_001081686) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: G6PC2
Synonyms: IGRP
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC223506 representing NM_001081686
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGATTTCTTCACAGGAATGGAGTGCTCATAATTCAGCATTTGCAGAAGGACTACCGAGCTTACTACA
CTTTTCTAAATTTTATGTCCAATGTTGGAGACCCAGGAATATCTTTTTCATTTATTTCCACTTTGTTT
TCAATTTAATCAGACAGTTGGAACCAAGATGATATGGGTAGCAGTCATTGGGGATTGGTTAAATCTTATA
TTTAAATGGATATTATTTGGTCATCGACCTTACTGGTGGGTCGAAGAACTCAGATTTACCCAAATCACT
CAAGTCCATGCCTTGAACAGTTCCTACTACATGTGAAACAGGTCCAGGAAGTCCATCTGGCCATGCAAT
GGGCGCATCCTGTGTCTGGTATGTCATGGTAACCGCTGCCCTGAGCCACACTGTCTGTGGGATGGATAAG
TTCTCTATCACTCTGCACAGGCATGCTGGTGGCAGAGGCCTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC223506 representing NM_001081686
Red=Cloning site Green=Tags(s)

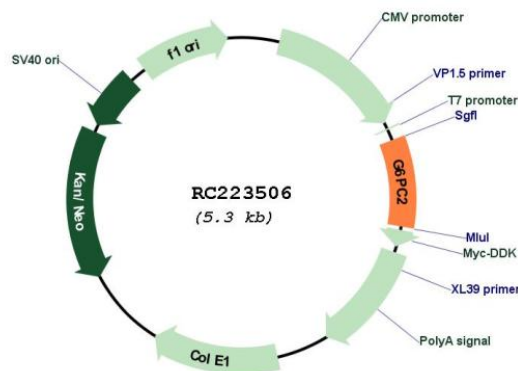
MDFLHRNGVLI IQHLQKDYRAYYTF LNFMSNVGDP RNIFFIYFPLCFQFNQTVGTKMIWVAVIGDWLNLI
FKWILFGHRPYWVQETQIYPNHSSPCLEQFP TTCETGPGSPSGHAMGASCVWYVMVTAALSHTVCGMDK
FSITLHRHAGGRGL

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI



Cloning Scheme:

Plasmid Map:


ACCN: NM_001081686

ORF Size: 462 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.
RefSeq:	<u>NM_001081686.2</u>
RefSeq Size:	2980 bp
RefSeq ORF:	465 bp
Locus ID:	57818
UniProt ID:	<u>Q9NQR9</u>
Cytogenetics:	2q31.1
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Adipocytokine signaling pathway, Galactose metabolism, Glycolysis / Gluconeogenesis, Insulin signaling pathway, Metabolic pathways, Starch and sucrose metabolism
MW:	17.6 kDa
Gene Summary:	This gene encodes an enzyme belonging to the glucose-6-phosphatase catalytic subunit family. These enzymes are part of a multicomponent integral membrane system that catalyzes the hydrolysis of glucose-6-phosphate, the terminal step in gluconeogenic and glycogenolytic pathways, allowing the release of glucose into the bloodstream. The family member encoded by this gene is found in pancreatic islets and does not exhibit phosphohydrolase activity, but it is a major target of cell-mediated autoimmunity in diabetes. Several alternatively spliced transcript variants of this gene have been described, but their biological validity has not been determined. [provided by RefSeq, Jul 2008]