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Product datasheet for MR228711

G6pc2 (NM_001289856) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	G6pc2 (NM_001289856) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	G6pc2
Synonyms:	G6pc; G6pc-rs; l; IGRP
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR228711 representing NM_001289856 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGGCTCATCGTGCGTCTGGTATGTCATGGTAACAGCTGCCCTAAGCTACACCATCAGCCGGATGGAGG AGTCCTCTGTCACTCTGCACAGACTGACCTGGTCCTTTCTGTGGAGTGTTTTCTGGTTGATTCAAATCAG CGTCTGCATCTCAAGAGTATTCATAGCCACACATTTCCCCCATCAGGTCATTCTTGGAGTGATTGGTGGG ATGCTAGTAGCCGAGGCCTTTGAACACACTCCAGGAGTCCACATGGCCAGCTTGAGTGTGTACCTGAAGA CCAACGTCTTCCTCTTCCTGTTTGCCCTCGGCTTTTACCTGCTTCTCCGACTGTTCGGTATTGACCTGCT GTGGTCCGTGCCCATCGCCAAAAAGTGGTGTGCCAACCCAGACTGGATCCACATTGACAGCACGCCTTTT GCTGGACTCGTGAGAAACCTCGGGGTCCTCTTTGGCTTGGGTTTCGCCATCAACTCAGAAATGTTCCTTC GGAGCTGCCAGGGAGAAAATGGCACCAAGCCGAGCTTCCGCTTGCTCTGTGCTCTGACCTCACTGACCAC AATGCAACTTTATCGCTTCATCAAGATCCCGACTCACGCGGAACCTTTATTTTACCTGTTGTCTTTCTGT AAAAGTGCGTCCATCCCCCTGATGGTGGTGGCTCTAATTCCCTACTGTGTACATATGTTAATGAGACCCG GTGACAAGAAGACTAAA ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

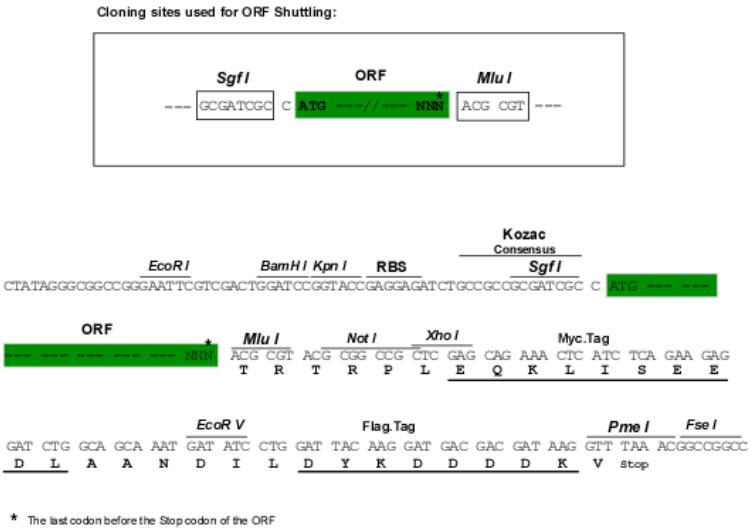
>MR228711 representing NM_001289856
Red=Cloning site Green=Tags(s)

MGSSCVWYVMVTAALSYTISRMEESSVTLHRLTWSFLWSVFWLIQISVCISRVFIATHFPHQVILGVIGG
MLVAEAFEHTPGVHMASLSVYLKTNVFLFLFALGFYLLLRLFGIDLLWSVPIAKKWCANPDWIHIDSTPF
AGLVRNLGVLFGLGFAINSEMFLRSCQGENGTKPSFRLLCALTSLTTMQLYRFIKIPTHAEPLFYLLSFC
KSASIPLMVVALIPYCVHMLMRPGDKKTK

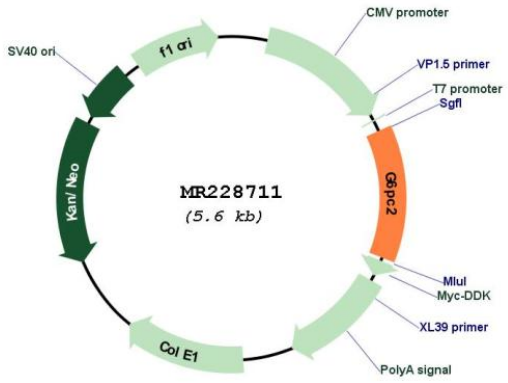
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001289856

ORF Size: 717 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:	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_001289856.1, NP_001276785.1
RefSeq Size:	1846 bp
RefSeq ORF:	720 bp
Locus ID:	14378
UniProt ID:	Q9Z186
Cytogenetics:	2 39.66 cM
MW:	27.4 kDa
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 RefSeq, Jan 2014]