

## Product datasheet for **RC205866**

### **G6PC3 (NM\_138387) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** G6PC3 (NM\_138387) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** G6PC3  
**Synonyms:** SCN4; UGRP  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC205866 ORF sequence  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGGAGTCCACGCTGGGCGGGGCATCGTGATAGCCGAGGCGCTACAGAACCAGCTAGCCTGGCTGGAGA  
ACGTGTGGCTCTGGATCACCTTTCTGGGCGATCCCAAGATCCTCTTTCTGTTCTACTTCCCCGGGCCTA  
CTACGCCCTCCCGCGTGTGGGCATCGCGGTGCTCTGGATCAGCCTCATCACCGAGTGGCTCAACCTCATC  
TTCAAGTGGTTTCTTTTGGAGACAGGCCCTTTGGTGGTCCATGAGTCTGGTTACTACAGCCAGGCTC  
CAGCCCAGGTTACCAGTCCCCTTTCTGTGAGACTGGTCCAGGCAGCCCTTCTGGACTGCATGAT  
CACAGGAGCAGCCCTCTGGCCATAATGACGGCCCTGTCTTCGAGGTGGCCACTCGGGCCCGCAGCCGC  
TGGGTAAGGGTGATGCCTAGCCTGGCTTATTGCACCTTCCTTTTGGCGGTTGGCTTGTCGCGAATCTTCA  
TCTTAGCACATTTCCCTACCAGGTGCTGGCTGGCCTAATAACTGGCGCTGTCTGGGCTGGCTGATGAC  
TCCCCGAGTGCCTATGGAGCGGGAGCTAAGCTTCTATGGGTTGACTGCACTGGCCCTCATGCTAGGCACC  
AGCCTCATCTATTGACCTCTTTACACTGGGCCTGGATCTTTCTGGTCCATCAGCCTAGCCTTCAAGT  
GGTGTGAGCGGCTGAGTGGATACAGTGGATAGCCGGCCCTTTGGCTCCCTGAGCCGTGACTCAGGGGC  
TGCCCTGGGCTGGCATTGCCTTGCACTCTCCCTGCTATGCCAGGTGCGTCGGGCACAGCTGGGAAAT  
GGCCAGAAGATAGCCTGCCTTGCTGGCCATGGGGCTGCTGGGCCCCCTGGACTGGCTGGGCCACCCCT  
CTCAGATCAGCCTCTTACATTTTCAATTTCTCAAGTACACCCTCTGGCCATGCCTAGTCTGGCCCT  
CGTGCCCTGGGCAGTGACATGTTTCAGTGCCAGGAAGCACCGCCATCCACTCTTCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC205866 protein sequence  
Red=Cloning site Green=Tags(s)

MESTLGAGIVIAEALQNQLAWLENVWLWITFLGDPKILFLFYFPAAYYASRRVGI AVLWISLITEWLNLI  
 FKWFLFGDRPFWWVHESGYYSQAPAQVHQFPSSCETGPGSPSGHCMITGAALWPIMTALSSQVATRARSR  
 WVRVMPSLAYCTFLLAVGLSRIFILAHFPHQVLAGLITGAVLGWLMTPRVPMERELSFYGLTALALMLGT  
 SLIYWTLFTLGLDLWSISLAFKWCERPEWIHVDSRPFASLSRDSGAALGLGIALHSPCYAQVRRACLGN  
 GQKIACLVLAMGLLGPLDWLGHPPIISLFYIFNFLKYTLWPCLVLALVPWAVHMFSAQEAPPIHSS

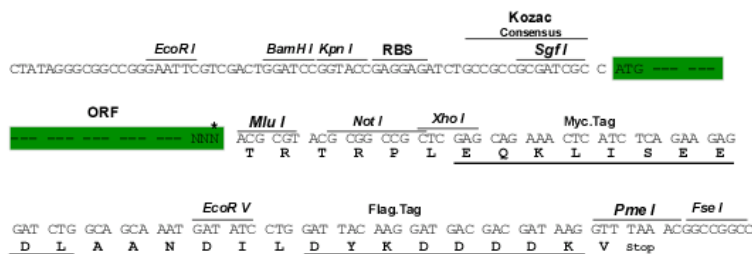
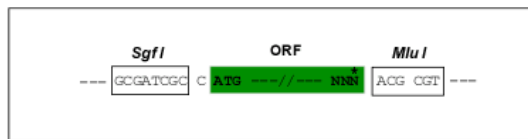
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6574\\_e06.zip](https://cdn.origene.com/chromatograms/mk6574_e06.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_138387

**ORF Size:** 1038 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_138387.4](#)

**RefSeq Size:** 1654 bp

**RefSeq ORF:** 1041 bp

**Locus ID:** 92579

**UniProt ID:** [Q9BUM1](#)

**Cytogenetics:** 17q21.31

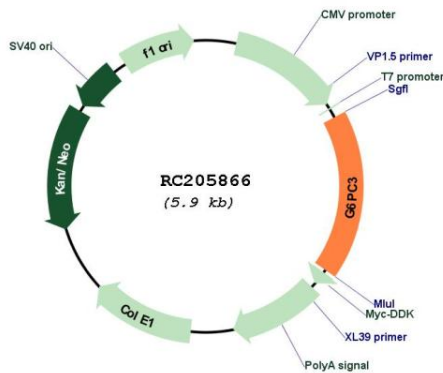
**Domains:** acidPPc

**Protein Families:** Druggable Genome, Transmembrane

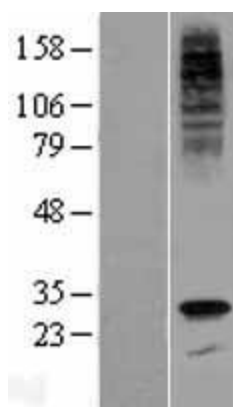
**MW:** 38.7 kDa

**Gene Summary:** This gene encodes the catalytic subunit of glucose-6-phosphatase (G6Pase). G6Pase is located in the endoplasmic reticulum (ER) and catalyzes the hydrolysis of glucose-6-phosphate to glucose and phosphate in the last step of the gluconeogenic and glycogenolytic pathways. Mutations in this gene result in autosomal recessive severe congenital neutropenia. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2016]

### Product images:



Circular map for RC205866



Western blot validation of overexpression lysate (Cat# [LY408652]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205866 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).