

## Product datasheet for **RC202874**

### PIGQ (NM\_148920) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PIGQ (NM_148920) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PIGQ
Synonyms:	c407A10.1; DEE77; EIEE77; GPI1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RC202874 representing NM\_148920  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGTGTCAAGGCCTTCTTCCCACGTGCTGCGTCTCGACGGACAGCGGGCTGCTGGTGGGACGGTGGG  
 TGCCGGAGCAGAGCAGCGCGTGGTCTGGCGGTCTGCACTTCCCTTCATCCCCATCCAGGTCAAGCA  
 GCTCCTGGCCAGGTGCGGCAGGCCAGCCAGGTGGGCGTGGCCGTGCTGGGCACCTGGTGCCACTGCCGG  
 CAGGAGCCGAGGAGAGCCTGGGCCGCTTCTGGAGAGCCTGGGTGCTGTCTTCCCCATGAGCCCTGGC  
 TGCGGCTGTGCCGGGAGAGAGCGGCACGTTCTGGAGCTGCGAGGCCACCCACGGCAAGCGCCACTGC  
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 CTACACCTGCCACCGTCTGCCGACCGCCAGGCTGGAGCCACCACTGCCAGCACGGGGGGCTGGCTG  
 CCGTCTTCGACACGGTAGCACGCAGTGAGGTGCTCTTCCGAGTGACCGCTTTGATGAGGGCCCCGTGGC  
 GCTGAGCCACTGGCAGTCGGAGGGCGTGGAGGCCAGCATCTCGCGGAGCTGGCCAGGCGAGCCTCGGA  
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 CACGCTAATCTTCAGTACACGGAAGGCGGAGAACCCTGCCAGCTGATGAGGAAGGCCAACACGGTGGCC  
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 CACATCCACCTGTGGATCAGTACATCCACCTCATGTCCCCTTCGTGGAGCACATCCTTTGGCACGTGG  
 GCCTCTCGGCCCTGCCTGGCCCTGACGGTGGCCCTGTCCCTCTCGGACATTATCGCCCTCCTCACCTT  
 CCACATCTACTGCTTTTACGTCTATGGAGCCAGGCTGTACTGCCTGAAGATCCATGGCCTGTCTACTG  
 TGGCGTCTGTTCCGGGGAGAAGTGAACGTTCTGCGCCAGCGCGTGGACTCCTGTTCTATGACCTGG  
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 ACCAGCTCAGCTGGCGCATGTCCTGTGCTTTGTGGACGCTGCTGTGTGCTCCTGAACACGGCAGGCCTG  
 CTATCACACCTTGGGCTTGGAGGTCAATGGGAGTGAGCAGATGTGGGGTGGCCAGCCAGGCTGGCCGCA  
 CTCCATCACTGGCACTGCCTGCCTTGGGACCGCTTCCCACCTGCTGCGGTACCATGGTGGCGAGCACA  
 GCAACCCAGGTGTCAGAGCACTGCCCATGCCACCTGTGTACCCAGGTCCAGAGGGTCCGTCCACC  
 ACAGCAGCCCCAGGTGGAGGGCTGGTCTCCCTGGGGGCTCCCCAGTGGCTCTGCCTGGCTGTGGGGTG  
 GAGGGACCTTGCAGGATGAACCCCAAGTCCCAGGCACCCTCTAGCTCCCTCAGCCGAACAGCACCCCTG  
 CATCTGGGGATTGAAGCAGTCGCTGACCCCGTCCCCAGCGGGCCCGGGCCCTACTCCCTGAACCACA  
 CGGGGTTTATTTGCGGATGTTCCCTGGAGAGTTCGCTTTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC202874 representing NM\_148920  
 Red=Cloning site Green=Tags(s)

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MVLKAFPPTCCVSTDSGLLVGRWVPEQSSAVVLAVLHFFPIPIQVKQLLAQVRQASQVGVAVLGTWCHCR
QEPEESLGRFLES LGAVFPHEPWLRLCRERGGTFWSCEATHRQAPTAPGAPGEDQVMLIFYDQRQVLLSQ
LHLPTVLPDRQAGATTASTGGLAAVFDTVARSEVLFRRSDRFDEGPVRLSHWQSEGVEASILAELARRASG
PICLLLASLLSLVSAVSACRVFKLWPLSFLGSKLSTCEQLRHRLEHLTLIFSTRKAENPAQLMRKANTVA
SVLLDVALGLMLLSWLHGRSRIGHLADALVPVADHVAEELQHLLQWLMGAPAGLKMNRALDQVLGRFFLY
HIHLWISYIHLMSPPFVEHILWHVGLSACLGLTVALSLLSDIIALLTFHIYCFYVYGARLYCLKIHGLSSL
WRLFRGKKWNVLRQRVSDSCSYDLQDLFIGTLLFTILLFLLPTTALYYLVFTLLRLLVVAVQGLIHLLVDL
INSLPLYSLGLRLCRPYRLADKPTALQPRGAHLPPPQLWLPPQALLGRPVPQAVPWGAHLEAERQAG
LRELLARLAPPHGHSQPSALPGWHQLSWRMSCALWTLCAPEHGRPCYHTLGLEVIGSEQMWWGPARLAA
LHHWHCLPWDPLPTCCGHHGGEHSNPRCEHCPMPTLCTQVQVRPPQPQVEGWSPWGLPSGSALAVGV
EGPCQDEPPSPRHPLAPSAEQHPASGGLKQSLTPVPSGPGPSLPEPHGVYLRMFPGEVAL
```

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg4201\\_a05.zip](https://cdn.origene.com/chromatograms/mg4201_a05.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_148920

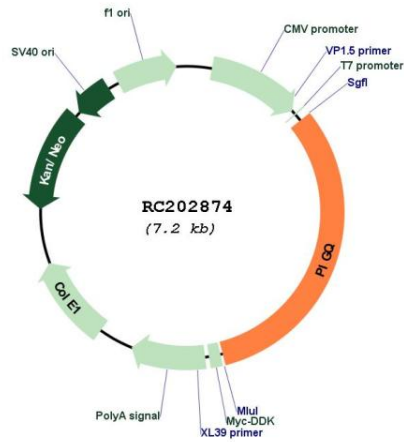
**ORF Size:** 2280 bp

**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](#)

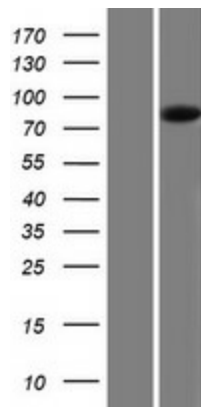
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_148920.3</a>
<b>RefSeq Size:</b>	2878 bp
<b>RefSeq ORF:</b>	2283 bp
<b>Locus ID:</b>	9091
<b>UniProt ID:</b>	<a href="#">Q9BRB3</a>
<b>Cytogenetics:</b>	16p13.3
<b>Domains:</b>	Gpi1
<b>Protein Families:</b>	Transmembrane
<b>Protein Pathways:</b>	Glycosylphosphatidylinositol(GPI)-anchor biosynthesis, Metabolic pathways
<b>MW:</b>	83.9 kDa
<b>Gene Summary:</b>	This gene is involved in the first step in glycosylphosphatidylinositol (GPI)-anchor biosynthesis. The GPI-anchor is a glycolipid found on many blood cells and serves to anchor proteins to the cell surface. This gene encodes a N-acetylglucosaminyl transferase component that is part of the complex that catalyzes transfer of N-acetylglucosamine (GlcNAc) from UDP-GlcNAc to phosphatidylinositol (PI). Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2012]

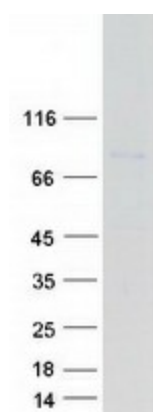
Product images:



Circular map for RC202874



Western blot validation of overexpression lysate (Cat# [LY407731]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202874 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PIGQ protein (Cat# [TP302874]). The protein was produced from HEK293T cells transfected with PIGQ cDNA clone (Cat# RC202874) using MegaTran 2.0 (Cat# [TT210002]).