

## Product datasheet for RC208388

### QPCT (NM\_012413) Human Tagged ORF Clone

#### Product data:

|                           |                                                                   |
|---------------------------|-------------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                               |
| Product Name:             | QPCT (NM_012413) Human Tagged ORF Clone                           |
| Tag:                      | Myc-DDK                                                           |
| Symbol:                   | QPCT                                                              |
| Synonyms:                 | GCT; QC; sQC                                                      |
| Mammalian Cell Selection: | Neomycin                                                          |
| Vector:                   | pCMV6-Entry (PS100001)                                            |
| E. coli Selection:        | Kanamycin (25 ug/mL)                                              |
| ORF Nucleotide Sequence:  | >RC208388 ORF sequence<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAGGCGGAAGACACCGGCGCGTCTGGGCACCTCCACCTGCTGCTGCTGGTGGCCGCCCTGCCCT  
GGGCATCCAGGGGGTCACTCCGAGTGCCTCAGCCTGGCCAGAGGAGAAGAATTACCACCAGCCAGCCAT  
TTTGAATTCATCGGCTCTTCGGCAAATTCAGAAGGCACCACTATCTCTGAAATGTGGCAAATGACTTA  
CAGCCATTGCTGATAGAGCGATACCCGGGATCCCCTGGAAGCTATGCTGCTCGTCAGCACATCATGCAGC  
GAATTCAGAGGCTTCAGGCTGACTGGGTCTTGGAAATAGACACCTTCTTGAGTCAGACACCTATGGGTA  
CCGGTCTTTCTCAAATATCATCAGCACCTCAATCCCCTGCTAAACGACATTTGGTCTCGCCTGCCAC  
TATGACTCCAAGTATTTTCCCCTGGAACAACAGAGTGTGGTAGGAGCCACTGATTCAGCCGTGCCAT  
GTGCAATGATGTTGGAACCTGCTCGTGCCTTAGACAAGAACTCCTTTCTTAAAGACTGTTTCAGACTC  
CAAGCCAGATTTGCTCACTCCAGCTGATCTTCTTGGTGAAGAGGCTTTTCTTCACTGGTCTCCTCAA  
GATTCTCTATGGGTCTCGACACTTAGCTGCAAAGATGGCATCGACCCCGCACCCACCTGGAGCGAGAG  
GCACCAGCAACTGCATGGCATGGATTTATTGGTCTTATTGGATTTGATTGGAGCTCAAACCCAACGTT  
TCCCAATTTTTTCCAACTCAGCCAGGTGGTTCGAAAGACTTCAAGCAATTGAACATGAACCTTCATGAA  
TTGGGTTTGTCAAGGATCACTCTTTGGAGGGCGGTATTTCCAGAATTACAGTTATGGAGGTGTGATT  
AGGATGACCATATTCATTTTTAAGAAGAGGTGTTCCAGTCTGATCTGATACCGTCTCCTTTCCCTGA  
AGTCTGGCACACCATGGATGACAATGAAGAAAATTTGGATGAATCAACCATTGACAATCTAAACAAAATC  
CTACAAGTCTTTGTGTTGGAATATCTTCATTTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >RC208388 protein sequence  
Red=Cloning site Green=Tags(s)

MAGGRHRRVVGTLHLLLLVAALPWASRGVSPSASAWPEEKNYHQPAILNSSALRQIAEGTISEMWQNDL  
 QPLLIERYPGSPGSYAARQHIMQRIQRLQADWLEIDTFLSQTPYGYRSFSNIISTLNPTAKRHLVLACH  
 YDSKYFSHWNNRVFVGATDSAVPCAMMLELARALDKKLLSLKTVSDSKPDL SLQLIFFDGEEAFLHWSPQ  
 DSLYGSRHLAAKMASTPHPPGARGTSQLHGMDLLVLLDLIGAPNPTFPNFFPNSARWFERLQAIHELHE  
 LGLLKDHSLEGRYFQNYSYGGVIQDDHIPFLRRGVPVLHLIPSPFPEVWHTMDDNEENLDESTIDNLNKI  
 LQVFVLEYLHL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6349\\_a04.zip](https://cdn.origene.com/chromatograms/mk6349_a04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_012413

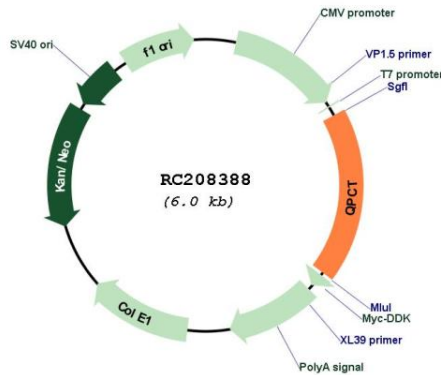
**ORF Size:** 1083 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

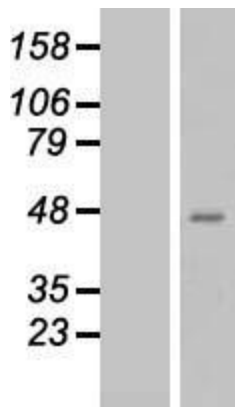
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in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

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>OTI Annotation:</b>        | 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_012413.4</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>RefSeq Size:</b>           | 1719 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>RefSeq ORF:</b>            | 1086 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Locus ID:</b>              | 25797                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>UniProt ID:</b>            | <a href="#">Q16769</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Cytogenetics:</b>          | 2p22.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Domains:</b>               | GlutaminyI_cycl                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Protein Families:</b>      | Protease                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>MW:</b>                    | 40.9 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Gene Summary:</b>          | This gene encodes human pituitary glutaminyI cyclase, which is responsible for the presence of pyroglutamyl residues in many neuroendocrine peptides. The amino acid sequence of this enzyme is 86% identical to that of bovine glutaminyI cyclase. [provided by RefSeq, Jul 2008]                                                                                                                                                                                                                                |

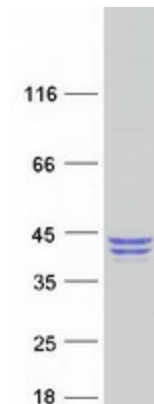
Product images:



Circular map for RC208388



Western blot validation of overexpression lysate (Cat# [LY415772]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208388 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified QPCT protein (Cat# [TP308388]). The protein was produced from HEK293T cells transfected with QPCT cDNA clone (Cat# RC208388) using MegaTran 2.0 (Cat# [TT210002]).