

## Product datasheet for **RG215828**

### PIP5KI gamma (PIP5K1C) (NM\_012398) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PIP5KI gamma (PIP5K1C) (NM_012398) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PIP5KI gamma
Synonyms:	LCCS3; PIP5K-GAMMA; PIP5K1-gamma; PIP5Kgamma
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide  
Sequence:

>RG215828 representing NM\_012398  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGAGCTGGAGGTACCGGACGAGGCGGAGAGCGCTGAGGCGGGGCGTGCCTCGGAGCGCGCTGGG  
CGGCAGAGAGCGGGCGGCGGCAGGTTTGGCTCAGAAGAAGGCGGCCCAACAGAGGTTCTGTCCATGAC  
GGCACAGCCGGGCCCTGGCCATGGGAAGAAGTTGGCCATCGAGGTGTGGACGCATCCGGCGAAACCACC  
TACAAGAAGACCACCTCCTCCACCCTGAAGGGTGCATCCAGCTGGGCATCGGCTACACCGTGGGCCACC  
TGAGCTCCAAGCCGAACCGGACGCTGCTCATGCAGGACTTCTACGTGGTGGAGAGCATCTTCTCCCCAG  
CGAAGGCAGAACCTCACCCCGCCACCATTCCAGGACTTCCGCTTCAAGACCTATGCACCTGTCGCC  
TTCGCTACTTCCGGGAGCTCTTTGGGATCCGGCCAGATGATTACTTGTACTCCCTGTGCAATGAGCCGC  
TGATCGAGCTGTCAACCCGGGCGCCAGTGGCTCCCTTCTACGTACCAGCGACGACGAGTTCATCAT  
CAAGACCGTCATGCACAAGGAGGCGGAGTTCCTGCAGAAGCTGCTCCCTGGCTACTACATGAACCTCAAC  
CAGAACC CGGGACGCTGCTGCCAAGTTCATGGGCTGTACTGCGTGCAGT CAGGGGGCAAGAATCC  
GCGTCGTGGTCATGAACAACATCCTGCCCGCGTGGTCAAGATGCACCTCAAGTTCGACCTCAAGGGCTC  
CACCTACAAGCGGCGCGCCAGCAAGAAGGAGAAGGAGAAGAGCTTCCCCACCTACAAGGACCTGGACTTC  
ATGCAGGACATGCCCGAGGGGCTCCTGTGGACGCCGACCTTCAGCGCCCTGGTCAAGACGCTGCAGC  
GGGACTGCCTGGTCTGGAAAGTTTCAAGATCATGGACTACAGCTGTGCTGGGCGTGCACAACATCGA  
CCAGCACGAGCGGAGCGGCAGGCGCAGGGCGCCAGAGCACCTCAGATGAGAAGCGGCTGTGGGCCAG  
AAGGCGCTCTACTCCACGGCCATGGAGTCCATCCAGGGTGGCGCCGCGCGGGGAGGCCATCGAATCGG  
ATGACACGATGGGCGGGATCCCCGCTGTGAACGGCCGCGGGGAGCGGCTGCTGCTGCACATTGGCATCAT  
CGACATCCTGCAGTCTACAGTTCATCAAGAACTGGAGCACACCTGGAAGGCCCTCGTCCACGATGGG  
GACACGGTGTCCGTCCACCGCCCGACTTCTATGCCGAGCGCTTTTTCAAGTTCATGAGCAACACGGTCT  
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CTGCGGGGGCCCGCAGCTACCCACGCTGGAGGACGAAAGCCGGCCCGACCTCCTGCCCTGCACGCCAC  
CTTCTTTGAAGAAGCCACTACAGCTCCATTGCCAGACTCTGTATCCACATCCCTCTCCATTCTGA  
GCGGTCCCCTCGGAGACGTGGAGCAGCCGCGGTACAGGCGGCGCACACAGTCGTCTGGACAGGATGGC  
AGGCCGACAGGAGGCCACCCGCGGAAGAGGATCTGCAGCAGATTACAGTGCAGGTGGAGCCTGCGTGCA  
GGTGGAGATTGTGGTCCCAAAGAGGAGGACGAGGGGTGGAGGCTTCCCGGCCGGTGCCTCTGCTGC  
TGTTGAAGTAGAAACTGCCAGCCAGGCCTCAGACGAGGAGGGCGCACCTGCCAGCCAGGCCCTCGGACGAG  
GAGGACGCGCCCGCCACCGACATCTACTTTCCACCGATGAGAGGAGCTGGGTGTACTCCCGCTCCACT  
ATAGCGCCAGGCCCGCCCGGCTCCGACGGCGAGAGCGACACA

ACGCGTACGCGGCGGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >RG215828 representing NM\_012398  
 Red=Cloning site Green=Tags(s)

MELEVPDEAESAEAGAVPSEAAWAAESGAAAGLAQKKAAPTEVL SMTAQPGPGHGKKLGHARGVDASGETT  
 YKKTSSSTLKGAIQLGIGYTVGHLSSKPERDVLMDQDFYVVESIFFPSEGSNLTPAHHFQDFRFTYAPVA  
 FRYFRELFGIRPDDYLYSLCNEPLIELSNPGASGSLFYVTSDDDEFIIKTMHKEAEFLQKLLPGYMNLN  
 QNPRTLPLPKFYGLYCVQSGGKNIRVVVMNNILPRVVKMHLKFDLKGSTYKRRASKKEKESFPTYKDLDF  
 MQDMEGLLLDADTF SALVKTLQRDCLVLESFKIMDYSLLLGVHNIDQHERERQAQGAQST SDEKRPVGQ  
 KALYSTAMESIQGGAARGEAIESDDTMGGIPAVNGRGERLLLHIGIIDILQSYRFIKKLEHTWKALVHDG  
 DTVSVHRPSFYAERFFKFSNNTVFRKNSLSSKSPSKKGRGGALLAVKPLGPTAAF SASQIPSEREEAQYD  
 LRGARSYPTLEDESRPDLLPCTPPSFEEATTASIATLSTLSIPERSPSETSEQPRYRRRTQSSGQDG  
 RPQEPPAAEDLQQITVQVEPACSV EIVVPKEEDAGVEASPAGASAAVEVETASQASDEEGAPASQASDE  
 EDAPATDIYFPTDERSWVYSPLHYSAQAPPASDGESDT

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_012398

**ORF Size:** 2004 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\\_012398.1](#), [NP\\_036530.1](#)

**RefSeq Size:** 5047 bp

**RefSeq ORF:** 2007 bp

**Locus ID:** 23396

**UniProt ID:** [O60331](#)

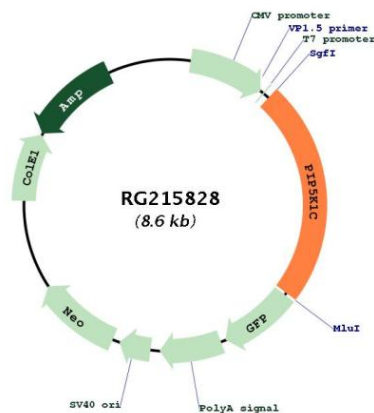
**Cytogenetics:** 19p13.3

**Protein Families:** Druggable Genome

**Protein Pathways:** Endocytosis, Fc gamma R-mediated phagocytosis, Focal adhesion, Inositol phosphate metabolism, Metabolic pathways, Phosphatidylinositol signaling system, Regulation of actin cytoskeleton

**Gene Summary:** This locus encodes a type I phosphatidylinositol 4-phosphate 5-kinase. The encoded protein catalyzes phosphorylation of phosphatidylinositol 4-phosphate, producing phosphatidylinositol 4,5-bisphosphate. This enzyme is found at synapses and has been found to play roles in endocytosis and cell migration. Mutations at this locus have been associated with lethal congenital contractural syndrome. Alternatively spliced transcript variants encoding different isoforms have been described.[provided by RefSeq, Sep 2010]

**Product images:**



Circular map for RG215828