

## Product datasheet for **RG238592**

### PIP5K1 beta (PIP5K1B) (NM\_001278253) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PIP5K1 beta (PIP5K1B) (NM_001278253) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PIP5K1B
Synonyms:	MSS4; STM7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG238592 representing NM\_001278253.  
 Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGTCTTCTGCTGCTGAAAAATGGAGAGGCAGCACCTGGAAAAACAAAATGAAGAAAAACCTATAAAAAG
ACTGCATCATCTGCTATTAAGGTGCTATTCAGCTGGGAATAGGATACACAGTGGGTAATCTCACTTCC
AAGCCAGAACGAGATGTTCTTATGCAAGACTTTTATGTGGTGGAAAGTGTTCCTACCCAGCGAAGGG
AGCAATCTGACCCAGCACATCACTACCCAGACTTTAGATTTAAGACATACGCTCCATTAGCATTCCGA
TATTTTCAGAGAACTTTTTGGTATCAAGCCTGATGATTACTTGTATTCCATCTGCAGTGAACCTCTAATA
GAACTGTCTAACCTGGAGCCAGTGGATCCTTGTTTTTGTGACCAGTGTATGAATTTATCATCAA
ACAGTTCAGCACAAAGAAGCTGAGTTTCTCAGAAGCTACTGCCAGGCTATTACATGAATTTAAACCAG
AATCCAAGGACTTTTTGCCAAAATTTACGGACTGTATTGTATGCAATCAGGAGGCATTAATATCAGG
ATTGTGGTGTGAACAACGTTTTGCCACGCTCCATGAGAATGCACCTTTACATATGACTTGAAGGCTCA
ACGTATAAGCGAAGAGCATCCCCTAAAGAGAGAGAGAAAATCCAACCCACATTTAAGGACTTAGATTTTC
CTGCAAGACATGCACGAAGGGTGTATTTTGTACGGAAACATACAACCGCTTATGAAAACACTTCAG
AGAGACTGCCGGGTGCTAGAAAGCTTCAAGATCATGGATTATAGCCTTCTGTTGGGAATTCATTTCTG
GACCATTCCCTCAAAGAGAAAAGAGGAGGAGACCCACAAAATGTGCCTGATGCTAAGCGGACTGGGATG
CAGAAGTTTCTACTCAACAGCCATGGAATCTATCCAGGGTCCAGGGAATCTGGAGATGGGATAATC
ACAGAGAACCCAGACACAATGGGAGGCATTCCAGCTAAAAGCCATAGGGGAGAAAACTACTTTTATTT
ATGGGCATTATTGACATTCTGCAATCATATAGGTTAATGAAGAAGTTAGAACATTCCTGGAAAGCTCTT
GTTTATGATGGGACACTGTTTCTGTTTCATAGACCAAGCTTTTATGCAGACAGATTTCTTAAGTTCATG
AATTCAGAGTTTTCAAGAAAATCAAGCTTTGAAGCTTACCCTAAGAAAACGGTGAATTTCAATC
GCCGCCCTAAAGGCCACTTCACAGGAGATTGTGTCTCAATTAGCCAGGAATGGAAGGATGAGAAGCGG
GATTTGCTGACTGAAGGACAAAGTTTTAGCAGCCTTGATGAAGAAGCCCTGGGATCCCGACAGGCCA
GACCTGTCCTAGCACTCCATCACTGTTTGAAGCTGCTTCTTGGCAACCACAATTTTCATCTTCTCC
TTATACGTCAATGAGCACTATCCACAGCAGGCCTACACTCTATTCAAACAGTAAG
ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAAAC
```

**Protein Sequence:**

>Peptide sequence encoded by RG238592  
 Blue=ORF Red=Cloning site Green=Tag(s)

```
MSSAAENGEAAPGKQNEEKTYKKTASSAIKGAIQLGIGYTVGNLTSKPERDVLMDQFYVVESVFLPSEG
SNLTPAHYDFRFRKTYAPLAFRYFRELFGIKPDDYLYSICSEPLIELSNPGASGLFFVTSDEFI IK
TVQHKEAEFLQKLLPGYYMNLNQNPRLLPKFYGLYCMQSGGINIRIVVMNNVLRSMRMHFTYDLKGS
TYKRRASRKEREKSNPTFKDLDFLQDMHEGLYFDTETYNALMKTQRDCRVLESFKIMDYSLLLGIHFL
DHSLKEKEEETPQNVDPDAKRTGMQKVLYSTAMESIQGPGKSGDGIITENPDTMGGIPAKSHRGEKLLLF
MGIIDILQSYRLMKKLEHSWKALVYDGDVSVHRPSFYADRFLKFMNSRVFKIQALKASPSKRCNSI
AALKATSQEI VSSISQEWKDEKRDLLTEGQSFSSLDDEALGSRHRPDLVPSTPSLFEAASLATTISSSS
LYVNEHYPHDRPTLYNSK
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYTNRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

**Restriction Sites:**

Sgfl-Mlul

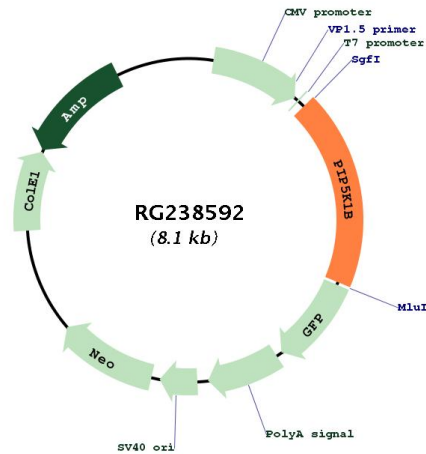
Cloning Scheme:

Cloning sites used for ORF Shutting:



EcoRI BamHI KpnI RBS Kozac Consensus SgfI AscI  
 CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGCCAGATCT  
  
 HindIII NheI RsrII MluI NotI XhoI GFP Tag  
 CAAGCTTAACTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- ---  
 T R T R P L E M E S D - - -  
  
 PmeI FseI  
 --- GAA GAA AGA GTT TAA ACGGCCGGCCGCGGAGCT  
 - - E E R V Stop

Plasmid Map:



ACCN: NM\_001278253

ORF Size: 1506 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).

RefSeq: [NM\\_001278253.1](#), [NP\\_001265182.1](#)

RefSeq Size:	2682 bp
RefSeq ORF:	1509 bp
Locus ID:	8395
UniProt ID:	<a href="#">O14986</a>
Cytogenetics:	9q21.11
Protein Families:	Druggable Genome
Protein Pathways:	Endocytosis, Fc gamma R-mediated phagocytosis, Inositol phosphate metabolism, Metabolic pathways, Phosphatidylinositol signaling system, Regulation of actin cytoskeleton
MW:	57.4 kDa
Gene Summary:	Participates in the biosynthesis of phosphatidylinositol 4,5-bisphosphate. Mediates RAC1-dependent reorganization of actin filaments. Contributes to the activation of PLD2. Together with PIP5K1A is required after stimulation of G-protein coupled receptors for stable platelet adhesion (By similarity).[UniProtKB/Swiss-Prot Function]