

## Product datasheet for **SC332136**

### PIK3R5 (NM\_001251851) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** PIK3R5 (NM\_001251851) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** PIK3R5  
**Synonyms:** F730038I15Rik; FOAP-2; p101; P101-PI3K  
**Vector:** pCMV6-Entry (PS100001)  
**Fully Sequenced ORF:** >SC332136 representing NM\_001251851.  
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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ATGGACAGCGGCTACGTGGAGGACAGCGAGGAGAGCTCCTCCGAGTGGCCTTGGAGGCGTGGCAGCCAG
GAACGCCGAGGCCACCGCAGGCCTGGGCAGAAGTTCATCAGGATCTATAAACTCTTCAAGAGCACCAGC
CAGCTGGTACTGCGGAGGGACTCTCGGAGCCTGGAGGGCAGCTCGGACACGGCCCTGCCCTGAGGCGG
GCAGGGAGCCTCTGCAGCCCCCTGGACGAACCAGTATCACCCCTTCCCGGGCCAGCGCTCCCGCTCC
CTGCCCCAGCCAACTCGGTACCCAGCTGCCAGCTGGCTTCTGGCCCTGCTTACGCCCCACAGCGC
CGCCGCCCTTCTGAGTGGAGATGAGGATCCCAAGGCTTCCACGCTACGTGTTGTGGTCTTTGGCTCC
GATCGGATTTTCAGGGAAGGTGGCTCGGGCGTACAGCAACCTTCGGCGGCTGGAGAACAATCGCCACTC
CTCACACGGTTCTTCAAACCTCAGTTCTTCTACGTGCCTGTGAAGCGAAGTCATGGGACCAGCCCTGGT
GCCTGTCCACCCCTCGGAGCCAGACGCCCTCACCCCGACAGACTCCCTTAGGCACGCCAGCCCTGGA
GAGCTGGGCACCACCCATGGGAGGAGAGACCAATGACATCTCCCACTACCTCGGCATGCTGGACCCC
TGGTATGAGCGCAATGTACTGGCCTCATGCACCTGCCCCCTGAAGTCTGTGCCAGCAGTCCCTGAAG
GCTGAAGCCCAGGCCCTGGAGGGCTCCCAACCCAGCTGCCATCCTGGCTGACATGCTACTCTACTAC
TGCCGCTTTGCCCCAGACCGGTGCTGCTGCAAGTCTATCAGACCGAGCTGACCTTCATCACTGGGGAG
AAGACGCAGAGATCTTCACTCCACTCCTTGGAGCTGGGTCACTCCGCTGCCACACGTGCCATCAAGGCG
TCAGGTCCTGGCAGCAAGCGGCTGGGCATCGATGGCGACCGGGAGGCTGTTCTCTAACACTACAGATT
ATTTACAGCAAGGGGCCATCAGTGGACGAAGTCGCTGGAGCAACCTGGAGAAGGTCTGTACCTCCGTG
AACCTCAACAAGGCTGCCGGAAGCAGGAGGAGCTGGATTCCAGCATGGAGGCCCTGACGCTAAACCTG
ACAGAAGTGGTAAAAGGCAGAACTCCAATCCAAGAAGGGCTTTAACAGATTAGCACATCGCAGATC
AAAGTGGACAAGGTGCAGATCATCGCTCCAACAGCTGCCCTTTGCTGTGTGCCTGGACCAGGATGAG
AGAAAGATCCTGCAGAGTGTAGTCAGATGTGAGGTCTCACCGTGTACAAGCCAGAGAAGAGCGACCTC
TCCTCACCACCCAGACGCTCCTGACCTGCCGCCCAGGCCGACCTGATCTCTGCTCCCTTCTCTGC
CTGCCATCATGACTTTCAGTGGAGCTCTGCC
```

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001251851  
**Insert Size:** 1485 bp



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<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<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_001251851.1</a>
<b>RefSeq Size:</b>	4605 bp
<b>RefSeq ORF:</b>	1485 bp
<b>Locus ID:</b>	23533
<b>UniProt ID:</b>	<a href="#">Q8WYR1</a>
<b>Cytogenetics:</b>	17p13.1
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Acute myeloid leukemia, Apoptosis, B cell receptor signaling pathway, Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Glioma, Insulin signaling pathway, Jak-STAT signaling pathway, Leukocyte transendothelial migration, Melanoma, mTOR signaling pathway, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, Non-small cell lung cancer, Pancreatic cancer, Pathways in cancer, Phosphatidylinositol signaling system, Progesterone-mediated oocyte maturation, Prostate cancer, Regulation of actin cytoskeleton, Renal cell carcinoma, Small cell lung cancer, T cell receptor signaling pathway, Toll-like receptor signaling pathway, Type II diabetes mellitus, VEGF signaling pathway
<b>MW:</b>	54.9 kDa

**Gene Summary:**

Phosphatidylinositol 3-kinases (PI3Ks) phosphorylate the inositol ring of phosphatidylinositol at the 3-prime position, and play important roles in cell growth, proliferation, differentiation, motility, survival and intracellular trafficking. The PI3Ks are divided into three classes: I, II and III, and only the class I PI3Ks are involved in oncogenesis. This gene encodes the 101 kD regulatory subunit of the class I PI3K gamma complex, which is a dimeric enzyme, consisting of a 110 kD catalytic subunit gamma and a regulatory subunit of either 55, 87 or 101 kD. This protein recruits the catalytic subunit from the cytosol to the plasma membrane through high-affinity interaction with G-beta-gamma proteins. Multiple alternatively spliced transcript variants encoding two distinct isoforms have been found. [provided by RefSeq, Oct 2011]

Transcript Variant: This variant (3) has an additional segment in an internal region, which results in a downstream AUG start codon, compared to variant 1. The resulting isoform (2) is shorter at the N-terminus than isoform 1. Variants 3-6 encode the same isoform 2.