

## Product datasheet for **SC337859**

### PI 3 Kinase catalytic subunit gamma (PIK3CG) (NM\_001282426) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PI 3 Kinase catalytic subunit gamma (PIK3CG) (NM_001282426) Human Untagged Clone
Tag:	Tag Free
Symbol:	PI 3 Kinase catalytic subunit gamma
Synonyms:	p110gamma; p120-PI3K; PI3CG; PI3K; PI3Kgamma; PIK3
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001282426, the custom clone sequence may differ by one or more nucleotides

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ATGGAGCTGGAGAACTATAAACAGCCCGTGGTGTCTGAGAGAGGACAACCTGCCGAAGGCGCCGGAGGATGA
AGCCGCGCAGTGTCTGCGGCCAGCCTGTCTCCATGGAGCTCATCCCCATCGAGTTCGTGTGCCACCAG
CCAGCGCAAATGCAAGAGCCCCGAAACGGCGCTGTGCACGTGGCCGGCCACGGCAACGTGGAGCAGATG
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ATCACTTCTCTCTCTATCAGAAGAAGGGGCGTGGTACGAGATCTACGACAAGTACCAGGTGGTGCA
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GGTGGCCAGCCGCGACCCCAAGCTTACGCCATGCACCCGTGGGTGACGTCCAAGCCCCTCCCGGAGTAC
CTGTGGAAGAAGATTGCCAACTGCATCTTCATCGTCATTACCCGACGACCACCAGCCAGACCATTAA
AGGTCTCACCCGACGACACCCCGGCGCCATCTGCAGAGCTTCTCACCAAGATGGCCAAGAAGAAATC
TCTGATGGATATCCCGAAAGCCAAAGCGAACAGGATTTGTGCTGCGCGTCTGTGGCCGGATGAGTAC
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AGCACCCAAAAGCATATCCTAAGCTATTTAGTTCAAGTAAATGGGGACAGCAAGAATTTGTGGCCAAAC
ATACCAATTGTTGGCCAGAAGGGAAGTCTGGGATCAAAGTGTCTTGGATGTTGGGTTAACAATGCAGCTC
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CTGGACTGCAACTTCTCAGATGAAAATGT AAGAGCCATTGCAGTTCAGAACTGGAGAGCTTGGAGGACG
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CACACTCCAGAAAATTCAGGACATCTGTGTTAAGGCTTATCTAGCCCTTCGTCATCACACAAACCTACT
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ATCCGGGATGCCCTCACAGTGGGGAAAAATGAGGAGGATGCTAAAAAGTATTTTCTTGATCAGATCGAAG
TTTGCAGAGACAAAGGATGGACTGTGCAGTTAATTGGTTTCTACATCTTGTCTTGGCATCAACAAGG
AGAGAAACATTCAGCCTAA
```

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_001282426

**OTI Disclaimer:** 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).

**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\\_001282426.1](#), [NP\\_001269355.1](#)

**RefSeq Size:** 7069 bp

**RefSeq ORF:** 3309 bp

**Locus ID:** 5294

**UniProt ID:** [P48736](#)

**Cytogenetics:** 7q22.3

<b>Protein Families:</b>	Druggable Genome, ES Cell Differentiation/IPS
<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, Inositol phosphate metabolism, 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>Gene Summary:</b>	<p>Phosphoinositide 3-kinases (PI3Ks) phosphorylate inositol lipids and are involved in the immune response. The protein encoded by this gene is a class I catalytic subunit of PI3K. Like other class I catalytic subunits (p110-alpha p110-beta, and p110-delta), the encoded protein binds a p85 regulatory subunit to form PI3K. This gene is located in a commonly deleted segment of chromosome 7 previously identified in myeloid leukemias. Several transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jun 2015]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. All three variants encode the same protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>