

## Product datasheet for **SC108470**

### PI 3 Kinase p55 gamma (PIK3R3) (NM\_003629) Human Untagged Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | PI 3 Kinase p55 gamma (PIK3R3) (NM_003629) Human Untagged Clone |
| Tag:                      | Tag Free  |
| Symbol:                   | PI 3 Kinase p55 gamma   |
| Synonyms:                 | p55; p55-GAMMA; p55PIK  |
| Mammalian Cell Selection: | None  |
| Vector:                   | <u><a href="#">pCMV6-XL5</a></u>                                |
| E. coli Selection:        | Ampicillin (100 ug/mL)  |



[View online »](#)

**Fully Sequenced ORF:**

```
>OriGene sequence for NM_003629 edited
GAATTCGGCACGAGGGGAGCCCGAGTCCCGGCCTCTGGGGGATTTCGCTCTCTGCAGACCA
GTGGGACCCCGAAACTTGAACGCAATCTCCAGCCCCCTTTTTTGCCTTCCTTTGTCACTT
GCCCGGTTTTCTCCAACGTGTTCTTTTTTCTCTTTCATTCTCCCTCCTTCGAAGGAC
ACAAAAGTGGCTTCCGCGGAAAGATTTGGAGGCGGTGGGAGCTTTTCTCCCGGAGAGCG
ACTGTGTAGAAAGGATTTTGGGAAGCCGCTTTTAAACACCTCTGCTCTCCGTCGCCCAA
GCCTCTGTGTAATCCTCTGAGGAGAAAAGCCCATAGCTTAAAAGTTCGGGGGCATTTTGT
TGTGTTCTGTAGGAGAGGGGGAGGACCCTGTTCCGGTGTGTTGGCCGGACTGGTACTG
GCCGTTGGAAAACCCGAAGTACATTTCCGTGTGGAACCTTTGCAGATATATATTTTGTAGA
TTTTTAAATACCAGATAAAAAATATATGCCTTCTATATATCTCCTGGCGACCTGCCCTG
ACAGCGGATGTACAATACGGTGTGGAGTATGGACCGGATGACGCAGACTGGAGGGAGC
TCTTCCACCAAAGCCACCTAAGCCAATGACTTCAGCAGTCCAAATGGAATGAAGGACAG
TTCTGTTTCTCTCAGGATGCAGAATGGTACTGGGGGATATTTCAAGGGAGGAGGTAAA
TGACAAAATGCGGGATATGCCAGATGGGACCTTCTTGGTCCGAGATGCCTCAACAAAAAT
GCAGGGAGATTACTTTGACTTTGCGGAAGGGAGGCAATAATAAGTTAATAAAGATCTA
TCACCGGATGGTAAATATGGCTTTTCTGATCCTCTGACATTTAATTCGGTGGTGGAGCT
CATTAACCACTATCACCATGAATCTTGTCTCAGTACAATCCCAAACCTGATGTGAAGCT
GATGTACCAGTGTCCAGATACCAACAGGATCAGTTGGTAAAAGAAGATAATATTGATGC
AGTAGGTAAGAACTGCAAGAATACCACTCTCAGTATCAGGAGAAGAGTAAAGAGTATGA
TAGGCTGTATGAAGAATACTAGAACATCCCAGGAAATACAGATGAAGAGGACTGCAAT
AGAAGCTTTTAAAGAAACATTTAAATATTTGAAGAGCAGTGTACACACAAGAACAACA
TAGCAAAGAATATATTGAGCGATTTCCGAGAGAGGGGAATGAAAAGGAGATTGAACGAAT
TATGATGAATATGATAAATGAAATCAGCTCTGGGTGAGATTCATGATAGCAAAATGCG
TCTAGAGCAGGATTTGAAGAAACAAGCTTTGGACAACCGAGAAATAGATAAAAAAATGAA
TAGTATCAAACCTGACCTGATCCAGCTGCGAAAGATCCGAGATCAACACCTTGTATGGCT
CAATCACAAAGGAGTGAGACAGAAACGCCTGAATGTCTGGCTGGGAATTAAGAATGAGGA
TGCTGATGAGAACTATTTATCAATGAGGAAGATGAAAACCTGCCCAATTATGATGAGAA
AACCTGGTTTGTGAGGATATCAATCGAGTACAAGCAGAGGACTTGCTTTATGGGAAACC
TGATGGTGCATTCTAATTCGTGAGAGTAGCAAGAAAGGATGCTATGCTTGTCTGTGGT
GGCCGATGGGGAAGTGAAGCACTGTGTGATCTACAGCACTGCTCGGGGCTATGGCTTTGC
AGAGCCCTACAACCTGTACAGCTCTCTGAAGGAGCTAGTGTCCATTACCAGCAGACATC
CTTGGTTCAGCACAACGACTCCCTCAACGTCAGGCTTGCCTACCCTGTTTCATGCACAGAT
GCCCTCGCTTTGCAGATAAAGAGGAAGTGGGAAGAGAGGTGGTTCTCTGGCATTTTTTTC
TACAGTTTTTATTAGACTACGATGAGGGCATTCTTTCTACATAGACTGCTTGTGTTTGCAC
AAGAAGTGATTTTGTGAATGTGAAGTGGAGAGGCCGAGCAGCAGCCGGCCGGATGGGGG
CATTAGAGGCCTGAGGTTCTCTAGGACTCAGCCATGCCGCTGCACTGACATACTAAGCTG
GAAGCAGATGTTTTTTTTXXXXXXXXXXXXXXXXXCTTTGGCAGTCTCTTCCCCCN
CGAAGAAGGCTGTTTAGGTTTTGTGATAGAATGGGATTTGATGAAAAGACAACCAAAGG
AAAATGGGGAGGNTTGGGATTTCAATTTAAATAATCTAAGCCAAGATGATAAAAAAACCT
TCAACTGAAGGTAATTTGTTTCTTACCAACATAATTTAGGCTTCAGCATCTCACCAGCCC
CTCCCTCTGAAGAAGTATTATGTTTCAGAAGCCAACAAAACAGTTTGTGTCAGACCAATG
TTTGATGGGAAAACGTGGCACTCATAGTTGAATGTATACTTCTGTACAAAACCTGAACA
TAAAAGACTAGAATTTGTGAGTTTTAGCAAACGCTAAAATTGATCACTGTAACCTAACCC
CTTCTGCTTCTCCTGCTGTTTCTCTGAGATGAGGAATAGCATTCTTTTTGTGGGATGG
TGAGCTTTGAATCATAAAATGAAGTTGGTGTGATGGTGTTCCTTAGCCTAAAGAAT
GATCTGTTGTTTGAACCTTTGTAACCTGTTTGTATGAGTAAAGAAAAGGTGCAAAAAA
AAAAAAAACCTCGAC
```

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_003629 unedited  
 GGTCAAAAATTGTATACGACTCATATAGGGCGGCCGCAATTCGCACGAGGGAGCCCGAG  
 TCCCGGCTCTGGGGGATTTCGCTCTCTGCAGACCAGTGGGACCCCGAACTTGAACGCAA  
 TCTCCAGCCCCCTTTTTTGCCTTCTTTGTCACTTGCCCGGGTTTCTCCAACGTGTTCT  
 TTTTTTCTCTTCACTTCCCTCCTTCGAAGGACACAAAAGTGGCTCCGCGGAAAGAT  
 TTGGAGGCGGTGGGAGCTTTTCTCCCGGAGAGCGACTGTGTAGAAAGGATTTTTGGGAA  
 GCCGCTTTTTAACACCTCTGCTCTCCGTCGCCAAGCCTCTGTGAATCCTCTGAGGAGA  
 AAAGCCCATAGCTTGAAAGTTCGGGGGCATTTTGTGTGTTCTGTAGGAGAGAGGGGGAG  
 GACCCTGTTCCGGGTAGTTTGGCCGACTGCTACTGGCCGTTGAAAACCCGAAAGTACATT  
 TCCGTGTGGAACCTTTGCAGATATATATTTTTAGATTTTTAAATACCAGATAAAAAATAT  
 ATGCCCTTATATATCTCTGGCGACCTGCCCTGACAGCGCGATGTACAATACGGTGTG  
 GAGTATGGACCGGATGACGCAGACTGGAGGGAGCTTCCACCAAGCCACCTAAGCCA  
 ATGACTTCAGCAGTTCAAATGGAATGAAGGACAGTCTGTTTCTTTCAGGATGCAGAA  
 TGGTACTGGGGGATATTTCAAGGGAGGAGGTAAAGACAAATTGCGGGATATGCCAGAT  
 GGGAACCTTCTTGGTCCGAGATGCCTCAACAAAATGCAGGGAGATTATACTTTGACTNTG  
 CGGAAGGGAGGGCATATAAAGTAATAAAGACTATCACCGNGATGGTAATATGGCTTTTT

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_003629 unedited  
 CCGCGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTTTGCACCTTTTCTTTACTCA  
 TACAAACAAGTTACAAGGTTTCAAACAACAGATCATTCTTTAGGCTAAGGAAACACCAT  
 ACAAGCACCAACTTCATTTTATGATTCAAAGCTCACCATCCCCACAAAAGAATGCTATT  
 CCTCATCTCAGAGAAACAGGCAGGAAGGACAGAAGGGTTAGTTACAGTGATCAATTTTA  
 GGGTTTGCTAAAACCTCACAAATCTAGTCTTTTTATGTTCAAGTTTTGGTACAGAAGTAT  
 ACATTCAACTATGAGTGCCACGTTTTCCCATCAAACATTGGTCTGGCAACAAACTGTTTT  
 GTTGGCTTCTGAACATAACTTCTTTCAGAGGGAGGGGCTGGTGAAGTGTGAAGCCTAA  
 ATTATGTTGGTAAGAAACAAAGTACCTTCAGTTGAAGTTTTTTTTATCATCTTGGCTTA  
 GATTATTTAAATGAAATCCCAAGCTCCCCATTTTCTTTGGTTGCTTTTTTTCATCAAA  
 CCCATTCTATCACAAAACCTAAACAGCCTTCTTCGTGGGGGAAGAGAGACTGCCAAAGC  
 AAAACACAACCTCCAGCAGAGCCATGCCCTGCTGCACTCTCAAGAGTTAGATTTTAAAA  
 AGACATGGTCTCTTCAGAGGCTTCAAATAACAACCCNACCCGCTATAACCATCAAGCT  
 AATATTCTGTTGAGGGTGTCTGCTAAACAAAACAAAACCCCATGAAACAGACTTCTAA  
 AAAACATCTGCTTCCAGCTTATATGTCAATGCACCGGCATGGCTGATTCTAAAGAACCT  
 CAGGCCTTAATGCCCCATCCCGNCCGGTTGCTGCTCGGNCTCTCCACTTAACATTA  
 CAAAATACCTTCTTGTGGCAAAACAGCGTCTATGTAGAAAGATGCCCTCTGTAGTCTAT  
 AAAACTGTAGAAA

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_003629

**Insert Size:**

2940 bp

**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).

|                               |   |
|-------------------------------|---|
| <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_003629.2</a> , <a href="#">NP_003620.2</a>   |
| <b>RefSeq Size:</b>           | 5621 bp   |
| <b>RefSeq ORF:</b>            | 1386 bp   |
| <b>Locus ID:</b>              | 8503  |
| <b>UniProt ID:</b>            | <a href="#">Q92569</a>  |
| <b>Cytogenetics:</b>          | 1p34.1  |
| <b>Domains:</b>               | SH2   |
| <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>Gene Summary:</b>          | <p>Phosphatidylinositol 3-kinase (PI3K) phosphorylates phosphatidylinositol and similar compounds, which then serve as second messengers in growth signaling pathways. PI3K is composed of a catalytic and a regulatory subunit. The protein encoded by this gene represents a regulatory subunit of PI3K. The encoded protein contains two SH2 domains through which it binds activated protein tyrosine kinases to regulate their activity. [provided by RefSeq, Jun 2016]</p> <p>Transcript Variant: This variant (1) represents the longest transcript. Both variants 1 and 2 encode the same protein.</p>  |