

Product datasheet for **SC332290**

PIK3CB (NM_001256045) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: PIK3CB (NM_001256045) Human Untagged Clone
Tag: Tag Free
Symbol: PIK3CB
Synonyms: P110BETA; PI3K; PI3KBETA; PIK3C1
Vector: pCMV6-Entry (PS100001)
Fully Sequenced ORF: >SC332290 representing NM_001256045.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
ATGTTGAATCCAATGGGAAGTGTCAAACAAATCCATATACTGAAAATGCAACAGCTTTGCATGTTAAA
TTTCCAGAGAATAAAAAACAACCTTATTATTACCCCTCCCTTCGATAAGAGTCGAGGTGGAAAAAGTTT
CTTCTGTATTGAAAGAAATCTTGGACAGGGATCCCTTGCTCAACTGTGTGAAAATGAAATGGATCTT
ATTTGGACTTTGCGACAAGACTGCCGAGAGATTTCCACAATCACTGCCAAAATTAAGTGTCAATC
AAGTGGAAATAAATTGAGGATGTTGCTCAGCTTCAGGCGCTGCTTCAGATTTGGCCTAAACTGCCCC
CGGGAGGCCCTAGAGCTTCTGGATTTCAACTATCCAGACCAGTACGTTGAGAATATGCTGTAGGCTGC
CTGCGACAGATGAGTGATGAAGAACTTTCTCAATATCTTTTACAAGTGGTCAAGTGTAAAATATGAG
CCTTTTCTTGATTGTGCCCTCTCTAGATTCTATTAGAAAAGAGCACTTGGTAATCGGAGGATAGGGCAG
TTTCTATTTTGGCATCTTAGGTGAGAAGTGCACATTCCTGCTGTCTCAGTACAATTTGGTGTCACTT
GAAGCATACTGCCGGGAAGTGTGGGCACATGAAAGTGTCTTCTAAGCAGGTTGAAGCACTCAATAAG
TAAAAAATTTAAATAGTTTAAATCAAACTGAATGCCGTGAAGTTAAACAGAGCCAAGGGGAAGGAGGCC
ATGCATACCTGTTTAAACAGAGTGCTTACCGGAAGCCCTCTCTGACCTGCAGTCACCCCTGAACCCA
TGTGTTATCCTCTCAGAAGTCTATGTTGAAAAGTGCAAATACATGGATTCCAAAATGAAGCCTTTGTGG
CTGGTATACAATAACAAGTATTTGGTGGAGGATTCAGTTGGAGTATTTTTAAAAATGGTATGATTTA
CGACAGGATATGTTGACACTCCAAATGTTGCGCTTGATGGATTTACTCTGAAAAGAAGCTGGTTTGGAT
CTTCGGATGTTGCCTTATGGCTGTTAGCAACAGGAGATCGCTCTGCCCTCATTGAAGTTGTGAGCACC
TCTGAAACAATTGCTGACATTCAGCTGAACAGTAGCAATGTGGCTGCTGCAGCAGCCTTCAACAAAGAT
GCCCTTCTGAACTGGCTTAAAGAATACTCTGGGATGACCTGGACCGAGCCATTGAGGAATTTACA
CTGTCTGTGCTGGCTACTGTGTAGCTTCTATGTCTTGGGATTGGTGACAGACATAGTGACAACATC
ATGGTCAAAAAACTGGCCAGCTTCCACATTGACTTTGGACATATTCTGGAAATTTCAAATCTAAG
TTTGGCATTAAAAGGGAGCGAGTGCCTTTTATTCTTACCTATGATTTTCCATGTCATTCAACAAGGA
AAAACAGGAAATACAGAAAAGTTTGGCCGTTCCGCCAGTGTGTGAGGATGCATATCTGATTTTACGA
CGGCATGGGAATCTTTCATCACTCTTTTGCCTGATGTTGACTGCAGGCTTCTGAACTCACATCA
GTCAAAGATATACAGTATCTTAAGGACTCTTGCATTAGGGAAGAGTGAAGAAGAAGCACTCAAACAG
TTTAAGCAAAAATTTGATGAGGCGCTCAGGGAAAGCTGGACTACTAAAGTGAAGTGGATGGCCACACA
GTTTCGAAAGACTACAGATCTTAA
```

Restriction Sites: SgfI-MluI



[View online »](#)

ACCN:	NM_001256045
Insert Size:	1749 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).
Reconstitution Method:	<ol style="list-style-type: none"> 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:	<u>NM_001256045.1</u>
RefSeq Size:	4797 bp
RefSeq ORF:	1749 bp
Locus ID:	5291
Cytogenetics:	3q22.3
Protein Families:	Druggable Genome
Protein Pathways:	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
MW:	66.8 kDa

Gene Summary:

This gene encodes an isoform of the catalytic subunit of phosphoinositide 3-kinase (PI3K). These kinases are important in signaling pathways involving receptors on the outer membrane of eukaryotic cells and are named for their catalytic subunit. The encoded protein is the catalytic subunit for PI3Kbeta (PI3KB). PI3KB has been shown to be part of the activation pathway in neutrophils which have bound immune complexes at sites of injury or infection. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2011]

Transcript Variant: This variant (2) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation at a downstream AUG compared to variant 1. The resulting protein (isoform 2) is shorter and has a distinct N-terminus compared to isoform 1.

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.