

Product datasheet for **SC107273**

PI 3 Kinase p85 alpha (PIK3R1) (NM_181504) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PI 3 Kinase p85 alpha (PIK3R1) (NM_181504) Human Untagged Clone
Tag:	Tag Free
Symbol:	PI 3 Kinase p85 alpha
Synonyms:	AGM7; GRB1; IMD36; p85; p85-ALPHA
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC107273 sequence for NM_181504 edited (data generated by NextGen Sequencing)

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ATGTACAATACTGTTTGGAAATATGGAAGACCTGGATTTAGAATATGCCAAGACAGATATA
AATTGTGGCACAGACTTGATGTTTTATATAGAAATGGACCCACCAGCACTGCCTCTAAA
CCACAAAACCTACTACTGTAGCCAACAACGGTATGAATAACAATATGTCCTTACAAGAT
GCTGAATGGTACTGGGAGATATCTCGAGGGAAGAAGTGAATGAAAACTTCGAGATACA
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ACACTAAGGAAAGGGGAAATAACAAATTAATCAAAATATTTTCATCGAGATGGGAAATAT
GGCTTCTCTGACCCATTAACCTTCAGTTCTGTGGTTGAATTAATAAACCCTACCGGAAT
GAATCTCTAGCTCAGTATAATCCCAAATGGATGTGAAATTACTTTATCCAGTATCCAAA
TACCAACAGGATCAAGTTGTCAAAGAAGATAATATTGAAGCTGTAGGGAAAAAATTACAT
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ATCCAGCTGAGAAAGACGAGAGACCAACTTGTGTTGGTGGTACTCAAAAAGGTGTTCCG
CAAAAGAAGTTGAACGAGTGGTTGGCAATGAAAACACTGAAGACCAATATTCCTGGTG
GAAGATGATGAAGATTTGCCCATCATGATGAGAAGACATGGAATGTTGGAAGCAGCAAC
CGAAACAAAGCTGAAAACCTGTTGCGAGGGAAGCGAGATGGCACTTTTCTGTCCGGGAG
AGCAGTAAACAGGGCTGCTATGCCTGCTCTGTAGTGGTGGACGGCGAAGTAAAGCATTGT
GTCATAAACAAAACAGCAACTGGCTATGGCTTTGCCGAGCCCTATAACTTGTACAGCTCT
CTGAAAGAAGTGGTGCTACATTACCAACACACCTCCCTTGTGCAGCACACGACTCCCTC
AATGTCACACTAGCCTACCCAGTATATGCACAGCAGAGGGCATGA

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Clone variation with respect to NM_181504.3



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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_181504 unedited ATTTTGTAACTACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGGACTCTTTTCT TATAACTGAGCTCAGCCAAGGAACTCTTGCACAAATGTACAATACTGTTTGGAAATATGG AAGACCTGGATTTAGAATATGCCAAGACAGATATAAATTTGGCACAGACTTGATGTTTT ATATAGAAATGGACCCACCAGCACTGCCTCCTAAACCACAAAACCTACTACTGTAGCCA ACAACGGTATGAATAACAATATGTCCTTACAAGATGCTGAATGGTACTGGGGAGATATCT CGAGGGAAGAAGTGAATGAAAACTTCGAGATACAGCAGACGGGACCTTTTTGGTACGAG ATGCGTCTACTAAAATGCATGGTGATTACTCTTACACTAAGGAAAGGGGAAATAACA AATTAATCAAAATATTTTCATCGAGATGGGAAATATGGCTTCTCTGACCCATTAACCTTCA GTTCTGTGGTTGAATTAATAAACCACTACCGGAATGAATCTCTAGCTCAGTATAATCCCA AATTGGATGTGAAATTACTTTATCCAGTATCCAAATACCAACAGGATCAAGTTGTCAAAG AAGATAATATTGAAGCTGTAGGGAAAAAATTACATGAATATAACACTCAGTTTCAAGAAA AAAGTCGAGAATATGATAGATTATGAAGAATATACCCGCACATCCCAGGAAATCCAAA TGAAAAGGACAGCTATTGAAGCATTTAATGAAACCATAAAAAATTTGAAGAACAGTGCC AGACCCAAGAGCGGTACAGCAAAGTATACATATGAAAGTTTAAACGTGGAGGCAATGAGA AAGAATACACAGATTATGCATAATTATGATAAGTTGAAGTCTCGCATCAGTGAATTATG ACAGTAGAG
Restriction Sites:	NotI-NotI
ACCN:	NM_181504
Insert Size:	2800 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:	NM_181504.2 , NP_852556.2
RefSeq Size:	5663 bp
RefSeq ORF:	1365 bp
Locus ID:	5295
UniProt ID:	P27986
Cytogenetics:	5q13.1
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, 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

Gene Summary:

Phosphatidylinositol 3-kinase phosphorylates the inositol ring of phosphatidylinositol at the 3-prime position. The enzyme comprises a 110 kD catalytic subunit and a regulatory subunit of either 85, 55, or 50 kD. This gene encodes the 85 kD regulatory subunit. Phosphatidylinositol 3-kinase plays an important role in the metabolic actions of insulin, and a mutation in this gene has been associated with insulin resistance. Alternative splicing of this gene results in four transcript variants encoding different isoforms. [provided by RefSeq, Jun 2011]
Transcript Variant: This variant (2) uses an alternate in-frame exon in the 5' coding region, compared to variant 1. The encoded isoform (2) 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.