

## **Product datasheet for SC331807**

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## PI 3 Kinase p85 alpha (PIK3R1) (NM\_001242466) Human Untagged Clone

## **Product data:**

**Product Type:** Expression Plasmids

Product Name: PI 3 Kinase p85 alpha (PIK3R1) (NM\_001242466) Human Untagged Clone

Tag: Tag Free

Symbol: PI 3 Kinase p85 alpha

Synonyms: AGM7; GRB1; IMD36; p85; p85-ALPHA

**Vector:** pCMV6-Entry (PS100001)

Fully Sequenced ORF: >SC331807 representing NM\_001242466.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

TCCCTCAATGTCACACTAGCCTACCCAGTATATGCACAGCAGAGGCGA<mark>TGA</mark>

Restriction Sites: Sgfl-Mlul

**ACCN:** NM 001242466

**Insert Size:** 1086 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:** 

- 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 001242466.1</u>

 RefSeq Size:
 5554 bp

 RefSeq ORF:
 1086 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

**MW:** 42.8 kDa

**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 (4) differs in the 5' UTR and coding sequence compared to

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

variant 1. The resulting isoform (4) has a shorter N-terminus compared to isoform 1.

coordinates used for the transcript record were based on transcript alignments.