

## Product datasheet for AP20797PU-M

## OriGene Technologies, Inc.

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## PI 3 Kinase p85 alpha (PIK3R1) pTyr458/199 Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

**Applications:** IF, IHC, WB

Recommended Dilution: Western blot: 1/500 - 1/1000.

Immunohistochemistry on paraffin sections: 1/50 - 1/200.

Immunofluorescence: 1/50 - 1/200.

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

Clonality: Polyclonal

**Specificity:** This antibody detects endogenous levels of p85a/p55 only when phosphorylated at

Tyr467/Tyr199.

**Formulation:** Phosphate buffered saline (PBS), pH 7.2.

State: Aff - Purified

State: Liquid purified lg fraction Preservative: 0.05% sodium azide

**Concentration:** 1.0 mg/ml

**Purification:** Affinity chromatography (> 95% (by SDS-PAGE)

**Conjugation:** Unconjugated

**Storage:** Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Predicted Protein Size:** ~ 55, 85 kDa

**Gene Name:** phosphoinositide-3-kinase regulatory subunit 1

Database Link: Entrez Gene 18708 MouseEntrez Gene 25513 RatEntrez Gene 5295 Human

P27986





Background:

The enzyme phosphatidylinositol 3 kinase (PI3 kinase) is a lipid kinase that generates phosphatidylinositol 3, 4, 5-triphosphate in response to receptor activation in many signal transduction pathways. Class IA PI3Ks exist as a heterodimer of a catalytic 110 kDa (p110) and a regulatory p85 subunit (e.g. p85 alpha). p85 alpha is an adaptor molecule that regulates the activity of the catalytic p110 subunit by binding to phosphorylated receptor tyrosine kinases (RTKs) through its SH2 domain and mediating the interaction between p110 and the plasma membrane. p85 alpha is necessary for insulinstimulated increase in glucose uptake and glycogen synthesis in insulin-sensitive tissues.

**Synonyms:** PI3K regulatory subunit alpha, PI3-kinase subunit p85-alpha

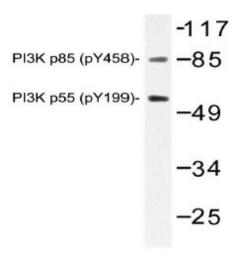
**Protein Families:** Druggable Genome

**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

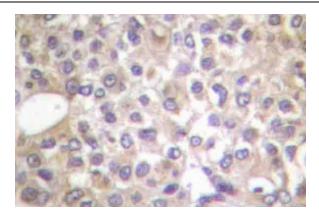
diabetes mellitus, VEGF signaling pathway

## **Product images:**



Western blot (WB) analysis of p-PI3K p85 (pTyr458)/p55 (pTyr199) antibody (Cat.-No.: [AP20797PU-N]) in extracts from NIH/3T3 cells.





Immunohistochemistry (IHC) analyzes of p-PI3K p85 (pTyr458)/p55 (pTyr199) antibody (Cat.-No.: [AP20797PU-N]) in paraffin-embedded human breast carcinoma tissue.