

Catalogue #	Aliquot Size
P31-30H-20	20 µg
P31-30H-50	50 µg

PI3K (p85 α) Protein

Full length recombinant protein expressed in Sf9 cells

Catalog # P31-30H

Lot # L314-3

Product Description

Recombinant full-length human PI3K (p85 α) was expressed using baculovirus in Sf9 cells using an N-terminal His tag. The gene accession number is [NM_181523](#).

Gene Aliases

PIK3R1, GRB1, p85-ALPHA

Formulation

Recombinant protein stored in 50mM sodium phosphate, pH 7.0, 300mM NaCl, 150mM imidazole, 0.1mM PMSF, 0.25mM DTT, 25% glycerol.

Storage and Stability

Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

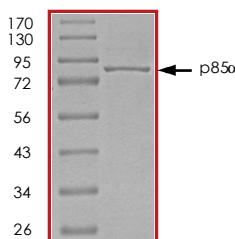
Scientific Background

The PI3K comprises of a 110 kDa catalytic subunit and a 85 kDa regulatory subunit. A number of isoforms of the 110 kDa catalytic subunit and the 85 kDa regulatory subunit exist in cells. p85 α modulates the interaction between PI3K and platelet-derived growth factor receptor (1). Furthermore, estrogen receptor isoform ER-alpha binds in a ligand-dependent manner to the p85-alpha regulatory subunit of PI3K. Stimulation with estrogen increases ER-alpha-associated PI3K activity, leading to the activation of protein kinase B/AKT and endothelial nitric oxide synthase (eNOS) (2).

References

1. Skolnik, E. Y. Et al: Cloning of PI3-kinase associated p85 utilizing a novel method for expression/cloning of target proteins for receptor tyrosine kinases. *Cell* 65: 83-90, 1991.
2. Simoncini, T. et al: Interaction of oestrogen receptor with the regulatory subunit of phosphatidylinositol-3-OH kinase. *Nature* 407: 538-541, 2000.

Purity



The purity of p85 α was determined to be **>95%** by densitometry. Approx. MW **86kDa**.

PI3K (p85 α) Protein

Full length recombinant protein expressed in Sf9 cells

Catalog Number	P31-30H
Specific Lot Number	L314-3
Purity	>95%
Concentration	0.2 µg/µl
Stability	1yr At -70°C from date of shipment
Storage & Shipping	Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on dry ice.

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