

Product datasheet

Recombinant Human PI 3 Kinase p85 beta protein ab125568

[1 Image](#)

Description

Product name	Recombinant Human PI 3 Kinase p85 beta protein
Purity	> 85 % Densitometry. Purity was determined to be >85% by densitometry.
Expression system	Baculovirus infected Sf9 cells
Accession	<u>O00459</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Predicted molecular weight	88 kDa including tags
Amino acids	1 to 728
Tags	His tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab125568** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Western blot SDS-PAGE
Form	Liquid

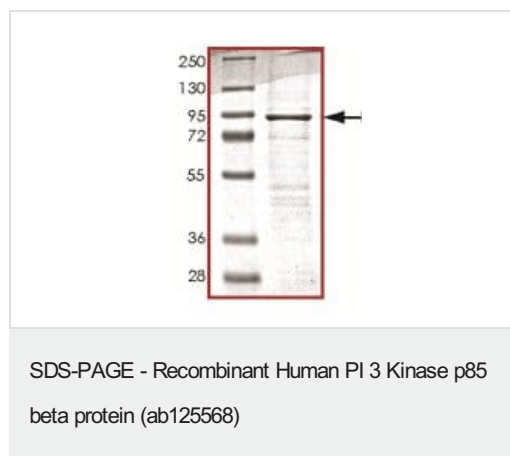
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 7.00 Preservative: 1.02% Imidazole Constituents: 0.002% PMSF, 0.81% Sodium phosphate, 0.004% DTT, 25% Glycerol (glycerin, glycerine), 1.75% Sodium chloride
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General Info

Function	Regulatory subunit of phosphoinositide-3-kinase (PI3K), a kinase that phosphorylates PtdIns(4,5)P2 (Phosphatidylinositol 4,5-bisphosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP3). PIP3 plays a key role by recruiting PH domain-containing proteins to the membrane, including AKT1 and PDK1, activating signaling cascades involved in cell growth, survival, proliferation, motility and morphology. Binds to activated (phosphorylated) protein-tyrosine kinases, through its SH2 domain, and acts as an adapter, mediating the association of the p110 catalytic unit to the plasma membrane. Indirectly regulates autophagy (PubMed:23604317). Promotes nuclear translocation of XBP1 isoform 2 in a ER stress- and/or insulin-dependent manner during metabolic overloading in the liver and hence plays a role in glucose tolerance improvement.
Involvement in disease	Megalencephaly-polymicrogyria-polydactyly-hydrocephalus syndrome 1
Sequence similarities	Belongs to the PI3K p85 subunit family. Contains 1 Rho-GAP domain. Contains 2 SH2 domains. Contains 1 SH3 domain.
Domain	The SH2 2 domain is required for interaction with FBXL2 and PTPN13.
Post-translational modifications	Phosphorylated in response to signaling from activated receptor-type protein kinases (PubMed:19690332, PubMed:20068231). Dephosphorylated by PTPRJ (PubMed:18348712). Dephosphorylated at Tyr-655 by PTPN13. Phosphorylation of Tyr-655 impairs while its dephosphorylation promotes interaction with FBXL2 and SCF(FBXL2)-mediated polyubiquitination (PubMed:23604317). Ubiquitinated. Polyubiquitination by the SCF(FBXL2) complex probably promotes proteasomal degradation of PIK3R2.

Images



SDS-PAGE analysis of ab125568.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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