

Product datasheet

Recombinant human PI3K(p110alpha/p55gamma) protein (Active) ab127617

[10 References](#) [5 Images](#)

Description

Product name Recombinant human PI3K(p110alpha/p55gamma) protein (Active)

Biological activity 420 nmol/min/mg.

Purity > 70 % Densitometry.
Affinity purified.

Expression system Baculovirus infected Sf9 cells

Accession [P42336](#)

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence

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HHHHHHLVPR GSPEF MPPRPSSGEL WGIHLMPPRI
LVECLLPNGM ITLECLREA TLITIKHELF KEARKYPLHQ
LLQDESSYIF VSVTQEAERE EFFDETRRLC
DLRLFQPFLLK VIEPVGNGREP KILNREIGFA IGMPVCEFDL
VKDPEVQDFR RNILNVCKEA VDLRDLNSPH
SRAMYVYPPN VESPELPHK MNKLDKGQI IVVWVWVSP
NNDKQKYTLK INHDCVPEQV IAEAIRKKTR SMLLSSEQLK
LCVLEYQGKY ILKVCGCDEY FLEKYPLSQY KYRSCIMLG
RMPNMLMAK ESLYQLPMD CFTMPSYSRR
ISTATPYMNG ETSTKSLWVI NSALRIKILC ATYVNVNIRD
IDKIYVRTGI YHGGEPLCDN VNTQRVPCSN
PRWNEWLNVD YPDLPRAA RLCLSICSVK
GRKGAKKEHC PLAWGNINLF DYTDTLVSGK
MALNLWPVPH GLEDLLNPIG VTGSPNPKET
PCLELEFDWF SSVVKFPDMS VIEEHANWSV
SREAGFSYSH AGLSNRLARD NELRENDKEQ
LKAISTRDPL SEITEQEKDF LWSHRHYCVT IPEILPKLLL
SVKWNSRDEV AQMYCLVKDW PPIKPEQAME
LLDCNYPDPM VRGFAVRCLE KYLTDDKLSQ
YLIQLVQVLK YEQYLDNLLV RFLKALTN QRIGHFFFWH
LKSEMHNKTV SQRFGLLLES YCRACGMYLK
HLNRQVEAME KLINLTDILK QEKKDETQKV
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QMKFLVEQMR RPDFMDALQG FLSPLNPAHQ
LGNLRLEECR IMSSAKRPLW LNWENPDIMS ELLFQNEII
FKNGDDLQRD MLTLQIIRIM ENWQNQGLD LRMLPYGCLS
IGDCVGLIEV VRNSHTIMQI QCKGGLKGAL QFNSTLHQW
LKDKNKGEIY DAAIDLFRS CAGYCVATFI LGIGDRHNSN
IMVKDDGQLF HIDFGHFLDH KKKKFGYKRE
RVPFVLTQDF LVISKGAQE CTKTREFERF QEMCYKAYLA
IRQHANLFIN LFSMMLGSGM PELQSFDDIA YIRKTLALDK
TEQEALYFM KQMNDAAHHGG WTKMDWIFH TIKQHALN
MYNTVWSMDR DDADWREVMMPYSTELEFYI
EMDPPALPPK PPKPMTSAVP NGMKPSSVSL
QDAEWYWGDI SREEVNDKLR DMPDGTFLVR
DASTKMGGDY TLTLRKGNN KLIKHYRDG KYGFSPLTF
NSVVELINHY HHESLAQYNP KLDVKLMYPV
SRYQQDQLVK EDNIDAVGKK LQEYHSQYQE
KSKEYDRLYE EYTRTSQEIQ MKRTAIEAFN ETIKIFEEQC
HTQEQHSKEY IERFRREGNE KEIERIMMNY DKLKSRLGEI
HDSKMRLEQD LKNQALDNRE IDKMNISIKP DLIQLRKIRD
QHLVWLNHKG VRQKRLNVWL GIKNEDADEN
YFINEEDENL PHYDEKTFV EDINRVQAED
LLYGKPDGAF LIRESSKKGK YACSVVADGE
VKHCVIYSTA RGYGFAEPYN LYSSLKELVL HYQQTSLVQH
NDSLNVRLAY PVHAQMPSLC R

Tags His tag N-Terminus

Additional sequence information (NM_006218) (BC021622) (Q92569)

Specifications

Our **Abpromise guarantee** covers the use of **ab127617** in the following tested applications.

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

Applications SDS-PAGE
Functional Studies
Western blot

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: 0.00174% PMSF, 0.82% Sodium phosphate, 0.00385% DTT, 25% Glycerol (glycerin, glycerine), 1.74% Sodium chloride
This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

Function Phosphorylates PtdIns, PtdIns4P and PtdIns(4,5)P2 with a preference for PtdIns(4,5)P2.

Involvement in disease

Defects in PIK3CA are associated with colorectal cancer (CRC) [MIM:114500].

Defects in PIK3CA are a cause of susceptibility to breast cancer (BC) [MIM:114480]. A common malignancy originating from breast epithelial tissue. Breast neoplasms can be distinguished by their histologic pattern. Invasive ductal carcinoma is by far the most common type. Breast cancer is etiologically and genetically heterogeneous. Important genetic factors have been indicated by familial occurrence and bilateral involvement. Mutations at more than one locus can be involved in different families or even in the same case.

Defects in PIK3CA are a cause of susceptibility to ovarian cancer (OC) [MIM:167000]. Ovarian cancer common malignancy originating from ovarian tissue. Although many histologic types of ovarian neoplasms have been described, epithelial ovarian carcinoma is the most common form. Ovarian cancers are often asymptomatic and the recognized signs and symptoms, even of late-stage disease, are vague. Consequently, most patients are diagnosed with advanced disease.

Defects in PIK3CA may underlie hepatocellular carcinoma (HCC) [MIM:114550].

Defects in PIK3CA are a cause of keratosis seborrheic (KERSEB) [MIM:182000]. A common benign skin tumor. Seborrheic keratoses usually begin with the appearance of one or more sharply defined, light brown, flat macules. The lesions may be sparse or numerous. As they initially grow, they develop a velvety to finely verrucous surface, followed by an uneven warty surface with multiple plugged follicles and a dull or lackluster appearance.

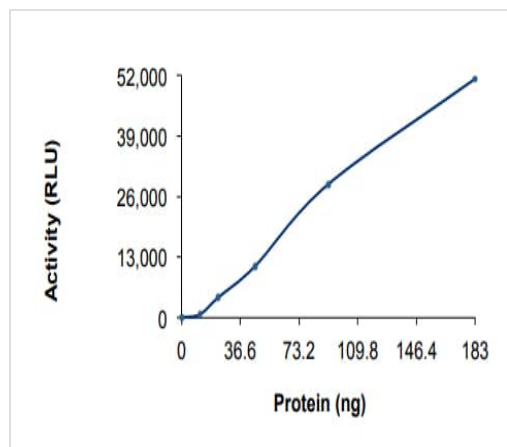
Sequence similarities

Belongs to the PI3/P14-kinase family.

Contains 1 C2 domain.

Contains 1 PI3K/PI4K domain.

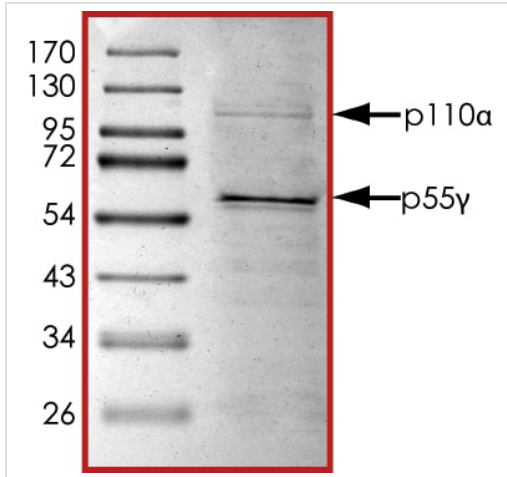
Images



The specific activity of PI3K(p110alpha/p55gamma) (ab127617) was determined to be 357 nmol/min/mg as per activity assay protocol

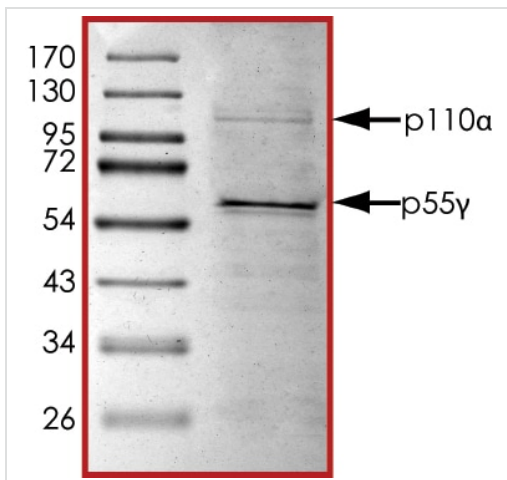
Functional Studies - Recombinant human
PI3K(p110alpha/p55gamma) protein (Active)
(ab127617)

SDS PAGE analysis of ab127617

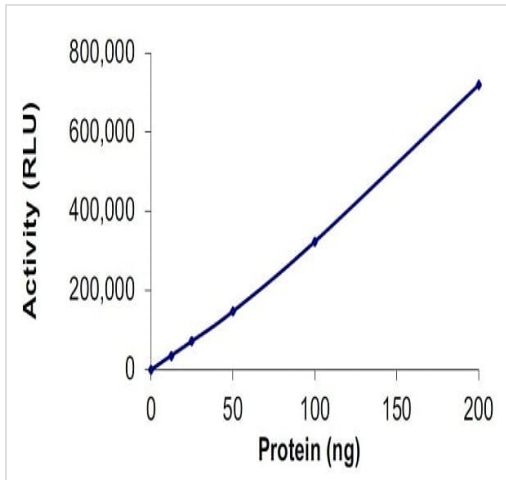


SDS-PAGE - Recombinant human
PI3K(p110alpha/p55gamma) protein (Active)
(ab127617)

SDS PAGE analysis of ab127617

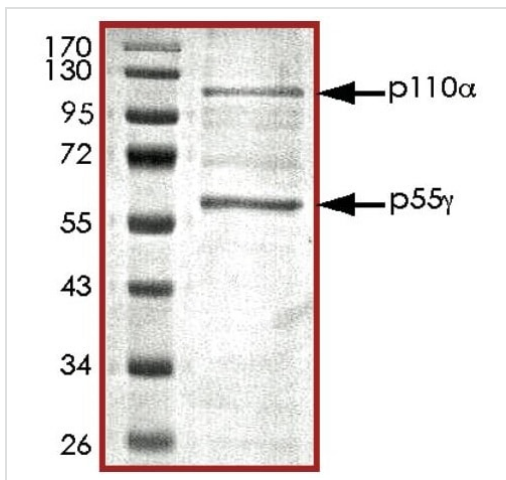


SDS-PAGE - Recombinant human
PI3K(p110alpha/p55gamma) protein (Active)
(ab127617)



The specific activity of ab127617 was found to be 420 nmol/min/mg as per activity assay protocol.

Functional Studies - Recombinant human
PI3K(p110alpha/p55gamma) protein (ab127617)



Purity >70% by densitometry.

p110alpha ~111kDa

p55gamma ~61kDa

SDS-PAGE - Recombinant human
PI3K(p110alpha/p55gamma) protein (ab127617)

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

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