

Certificate of Analysis

PI3K-C2γ, active

(Recombinant enzyme expressed in Sf21 insect cells)

Item # 14-910, 14-910-K, 14-910M

Parent Lot # 2023057

The data presented in this document apply to the parent lot shown above and to all pack sizes derived from subsequent vialling runs of this parent lot. An alphabetical suffix after the parent lot number is used to denote each vialling run.

Product Description: N-terminal GST-tagged recombinant human PI3K-C2γ amino acids 468–1203, expressed by baculovirus in Sf21 insect cells. Purified using glutathione agarose.

Purity 70.5% by SDS-PAGE and Coomassie blue staining. MW = 112kDa.

Specific Activity (Parent lot# 2023057):

953U/mg, where one unit of PI3K-C2γ, active activity is defined as 1nmol phosphatidylinositol 3-phosphate (PI(3)P) formed per minute at room temperature with a final ATP concentration of 200μM.

Formulation: 0.406mg/ml of enzyme in 50mM Tris/HCl pH7.5, 300mM NaCl, 0.1mM EGTA, 0.03% Brij-35, 270mM sucrose, 0.2mM PMSF, 1mM benzamidine, 0.1% 2-mercaptoethanol. Frozen solution.

Storage and Stability: On receipt of material store at -70°C. Unopened reagent is stable for a minimum of 1 year from date of shipment when stored at recommended storage temperature. Avoid repeat freeze/thaw cycles. For maximum recovery of product, centrifuge original vial prior to removing the cap.

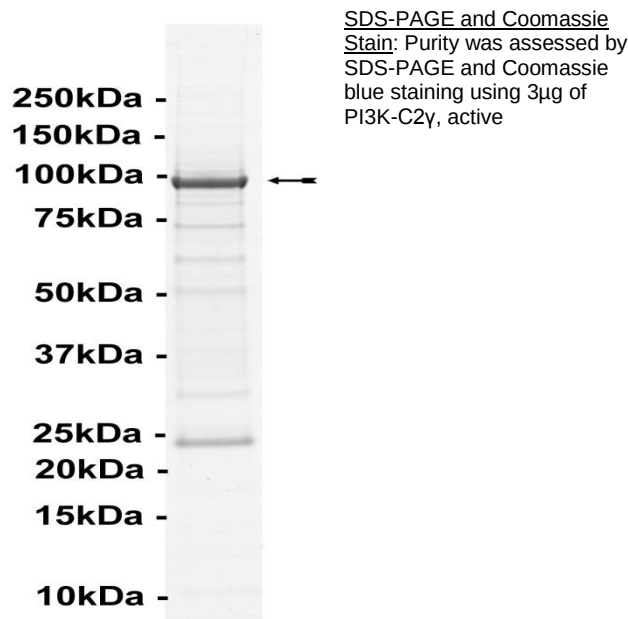
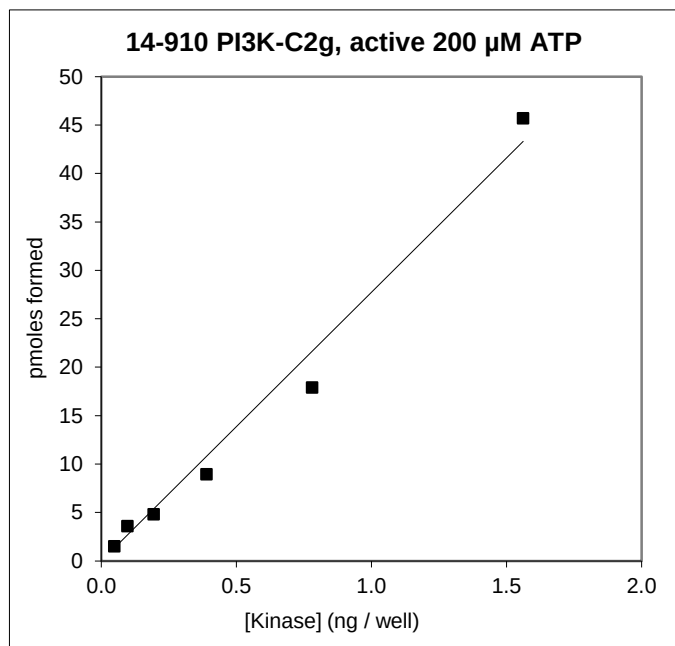
Handling Recommendations: Rapidly thaw the vial under cold water and immediately place on ice. Aliquot unused material into pre-chilled micro-centrifuge tubes and immediately snap-freeze the vials in liquid nitrogen prior to re-storage at -70°C.

**FOR IN VITRO RESEARCH USE ONLY
NOT FOR USE IN HUMANS OR ANIMALS**

Quality Control Testing

Kinase Assay: 0.05–1.56ng of this enzyme phosphorylated 25μM phosphatidylinositol in the assay referenced on page two.

MS Tryptic Fingerprint: Confirmed identity as PI3K-C2γ with the translated sequence listed on page three.



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Eurofins PI3 Kinase Homogeneous Time-resolved Fluorescence (HTRF) Class II Reagent Kits

The following Eurofins kits are suitable for use with this enzyme. Assay protocol can be found in the corresponding Certificate of Analysis.

Cat. No	Kit Description
33-038	PI 3-Kinase (Class II) HTRF Assay 1-plate kit
33-039	PI 3-Kinase (Class II) HTRF Assay 5-plate kit

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PI3K-C2γ Sequence Information

Protein	human PI3K-C2γ
Tags	N-terminal GST
Native sequence	Q237 of the recombinant protein is equivalent to Q468 of human PI3K-C2γ
Accession number	GenBank BC130277

Recombinant PI3K-C2γ amino acid sequence:

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1  MSPILGYWKI KGLVQPTRLL LEYLEEKYEE HLYERDEGDK WRNKKFELGL EFPNLPYYID
61  GDVKLTQSMA IIRYIADKHN MLGGCPKERA EISMLEGAVL DIRYGVSRIA YSKDFETLKV
121 DFLSKLPEML KMFEDRLCHK TYLNGDHVTH PDFMLYDALD VVLYMDPMCL DAFPKLVCFK
181 KRIEAIQID KYLKSSKYIA WPLQGWQATF GGGDHPPKSD LEVLFQGPEF KGLRRHQSSE
241 TSAKGLIEKV TTELSTSIYQ LINVCNSFY ADFQPVNVPR CTSYLNPLGL SHLSFTVYAA
301 HNIPETWVHR INFPLEIKSL PRESMLTVKL FGIACATNNA NLLAWTCLPL FPKEKSILGS
361 MLFSMTLQSE PPVEMITPGV WDVSQSPSVT LQIDFPATGW EYMKPDSEEN RSNLEEPLKE
421 CIKHIALRSQ KQTPLLLSEE KKRYLWFYRF YCENNENCSLP LVLGSAPGWD ERTVSEMHTI
481 LRRWTFSQL EALGLLTSSF PDQEIIRKQVAV QQLDNLLNDE LLEYLPQLVQ AVKFERNLES
541 PLVQLLLHRS LQSIQVAHRL YWLLKNAENE AYFKSWYQKL LAALQFCAGK ALNDEFSKEQ
601 KLIKILGDIG ERVKSASDHQ RQEVLLKEIG RLEEFFQDVN TCHLPLNPAL CIKGIDHDAC
661 SYFTSNALPL KITFINANLM GKNISIIFFKA GDDLRLQDMLV LQLIQVMDNI WLQEGLDMMQ
721 IIRCLSTGK DQGLVQMPVD AVTLAKIHRH SGLIGPLKEN TIKKWFSQHN HLKADYEKAL
781 RNFFYSCAGW CVVTFILGVC DRHNDNIMLT KSGHMFHIDF GKFLGHAQTF GGIKRDRAFP
841 IFTSEMEYFI TEGGKNPQHF QDFVELCCRA YNIIRKHSQ LNLNLEMMLY AGLPELSGIQ
901 DLKYVYNNLR PQDTDLEATS HFTKKIKESL ECFPVKLNLL IHTLAQMSAI SPAKSTSQTF
961 PQESCLLSTT RS

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Recombinant PI3K-C2γ nucleotide sequence:

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1  atgtccccta tactaggtta ttggaaaatt aagggccttg tgcaaccacac tcgacttctt
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121  tggcgaaaca aaaagtttga attgggtttg gagtttccca atcttcctta ttatattgat
181  ggtgatgtta aattaacaca gtctatggcc atcatagctt atatagctga caagcacac
241  atgttgggtg gttgtccaaa agagcgtgca gagatttcaa tgcttgaagg agcgggtttg
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