

Certificate of Analysis

PI3K-C2 α , active

(Recombinant enzyme expressed in Sf21 insect cells)

Item # 14-906, 14-906-K, 14-906M

Parent Lot # 1654903

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 6His-tagged recombinant human PI3K-C2 α amino acids 299–end. Expressed by baculovirus in Sf21 insect cells. Purified using immobilized metal affinity chromatography.

Purity 72% by SDS-PAGE and Coomassie blue staining. MW = 161kDa.

Specific Activity (Parent lot# 1654903):

164U/mg, where one unit of PI3K-C2 α , active activity is defined as 1nmol phosphatidylinositol 3-phosphate (PI(3)P) formed per minute at room temperature with a final ATP concentration of 200 μ M.

Formulation: 0.76mg/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, 20mM β -glycerophosphate, 0.25mM Na₃VO₄, 10mM NaF. 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.

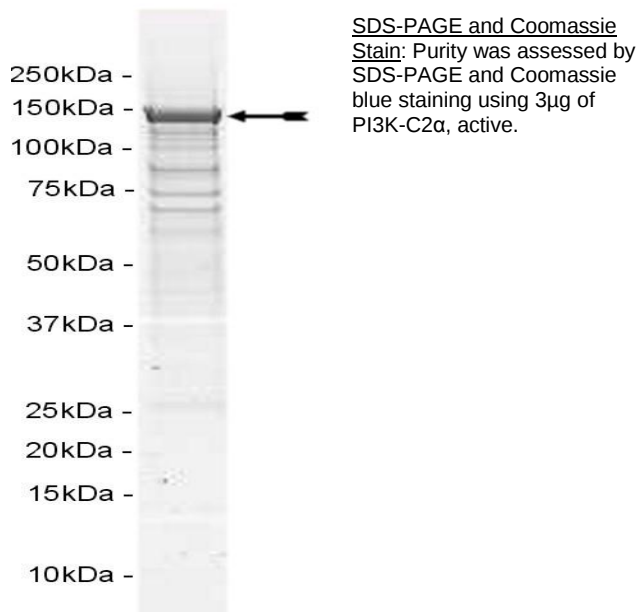
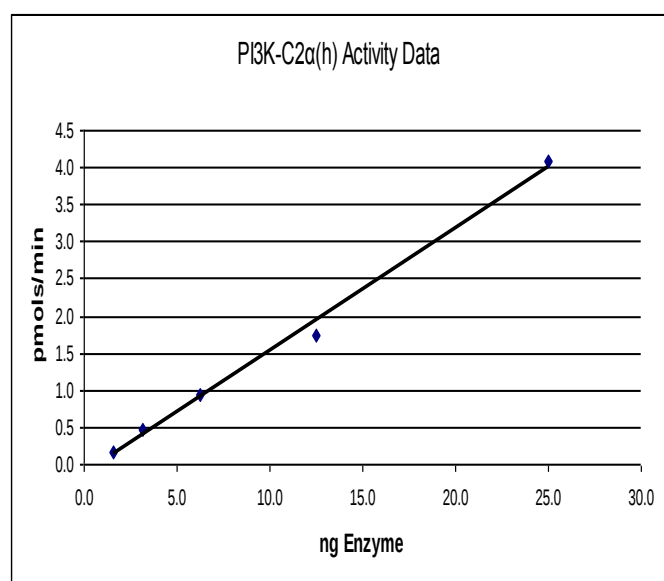
Handling Recommendations: Rapidly thaw the vial under cold water and immediately place on ice. Aliquot unused material into pre-chilled micro-centrifuge tubes and immediately snap-freeze the vials in liquid nitrogen prior to re-storage at -70°C.

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

Quality Control Testing

Kinase Assay: 1.5–25ng of this enzyme phosphorylated 25 μ M phosphatidylinositol in the assay referenced on page two.

MS Tryptic Fingerprint: Confirmed product identity as PI3K-C2 α 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-C2 α Sequence Information

Protein	Human PI3K-C2 α
Tags	N-terminal 6His
Native sequence	L27 of the recombinant protein is equivalent to L299 of human PI3K-C2 α
Accession number	GenBank BC113658

Recombinant PI3K-C2 α amino acid sequence:

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1  MSYYHHHHH  DYDIPTTENL  YFQGAMLAKE  PDAVLLLEER  STANCHLERK  VNGKSLSVAT
61  VTRSQSLNIR  TTQLAKAQGH  ISQKDPNGTS  SLPTGSSLLQ  EVEVQNEEMA  AFCRSITKLK
121 TKFPYTNHRT  NPGYLLSPVT  AQRNICGENA  SVKVSIDIEG  FQLPVTFTCD  VSSTVEIIM
181 QALCWVHDDL  NQVDVGSYVL  KVCQGEEVLQ  NNHCLGSHEH  IQNCRKWDTE  IRLQLLTFSA
241 MCQNLARTAE  DDETPVDLNL  HLYQIEKPCK  EAMTRHPVEE  LLDSYHNQVE  LALQIENQHR
301 AVDQVIKAVR  KICSALDGEV  TLAITESVKK  LKRAVNLPRS  KTADVTSLFG  GEDTSRSSTR
361 GSLNPENPVQ  VSINQLTAAI  YDLLRLHANS  GRSPTDCAQS  SKSVKEAWTT  TEQLQFTIFA
421 AHGISSNWVS  NYEKYYLICS  LSHNGKDLFK  PIQSKKVGTY  KNFFYLIKWD  ELIIFPIQIS
481 QLPLESVLHL  TLFILNQSS  GSSPDSNKQR  KGPEALGKVS  LPLDFKRFLL  TCGTKLLYLW
541 TSSHTNSVPG  TVTKKGYVME  RIVLQVDFPS  PAFDIIYTTP  QVDRSIIQQH  NLETLENDIK
601 GKLLDILHKD  SSLGLSKEDK  AFLWEKRYYC  FKHPNCLPKI  LASAPNWKWV  NLAITYSLH
661 QWPALYPLIA  LELLDSEFAD  QEVRSIAVTV  IEAISDELT  DLLPQFVQAL  KYEILNSSL
721 VQFLLSRALG  NIQIAHNLYW  LLKDALHDVQ  FSTRYEHVLG  ALLSVGGKRL  REELLKQTKL
781 VQLLGGVAEK  VRQASGSARQ  VVLQRSMERV  QSFFQKNKCR  LPLKPSLVAK  ELNIKSCSFF
841 SSNAVPLKVT  MVNADPMGEE  INVMFKVGED  LRQDMLALQM  IKIMDKIWLK  EGLDLRMVIF
901 KCLSTGRDRG  MVELVPASDT  LRKIQVEYGV  TGSFKDKPLA  EWLRYKNPSE  EEYEKASENF
961 IYSCAGCCVA  TYVLGICDRH  NDNIMLRSTG  HMFHIDFGKF  LGHAQMFGSF  KRDRAPFVLT
1021 SDMAYVINGG  EKPTIRFQLF  VDLCCQAYNL  IRKQTNLFLN  LLSLMIPSGL  PELTSIQDLK
1081 YVRDALQPQT  TDAEATIFFT  RLIESSLGSI  ATKFNFFIHN  LAQLRFSGLP  SNDEPILSFS
1141 PKTYSFRQDG  RIKEVSVFTY  HKKYNPDKHY  IYVVRILREG  QIEPSFVFRT  FDEFQELHNK
1201 LSIIFPLWKL  PGFPMRMVLG  RTHIKDVAAK  RKIELNSYLQ  SLMNASTDVA  ECDLVCTFFH
1261 PLLRDEKAEG  IARSADAGSF  SPTPGQIGGA  VKLSISYRNG  TLFIMVMHIK  DLVTEDGADP
1321 NPYVKTYLLP  DNHKTSKRKT  KISRKTRNPT  FNEMLVYSGY  SKETLRQREL  QLSVLSAESL
1381 RENFFLGGVT  LPLKDFNLSK  ETVKQYQLTA  ATYL

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Recombinant PI3K-C2 α nucleotide sequence:

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1  atgtcgtagt  accatcacca  tcaccatcac  gattacgata  tcccaacgac  cgaaaacctg
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361 accaaatttc  catatacaca  tcaccgcaca  aaccaggct  atttgttaag  tccagtcaca
421 gcgcaaagaa  acatatgcgg  agaaaatgct  agtgtgaagg  tctccattga  cattgaagga
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