

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.

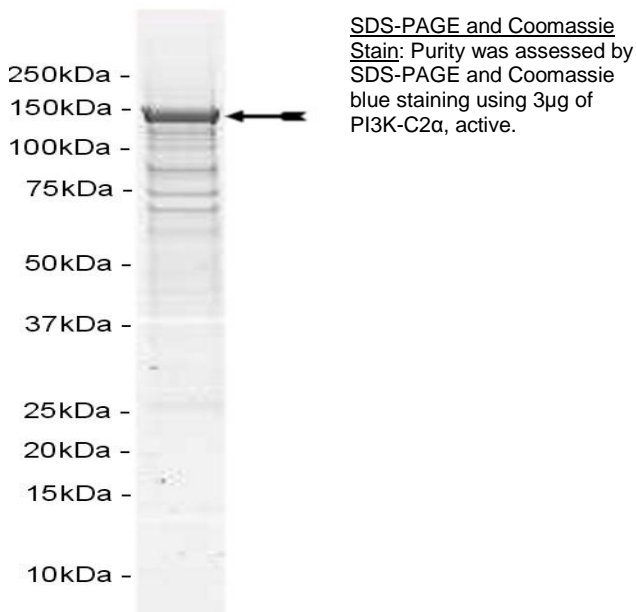
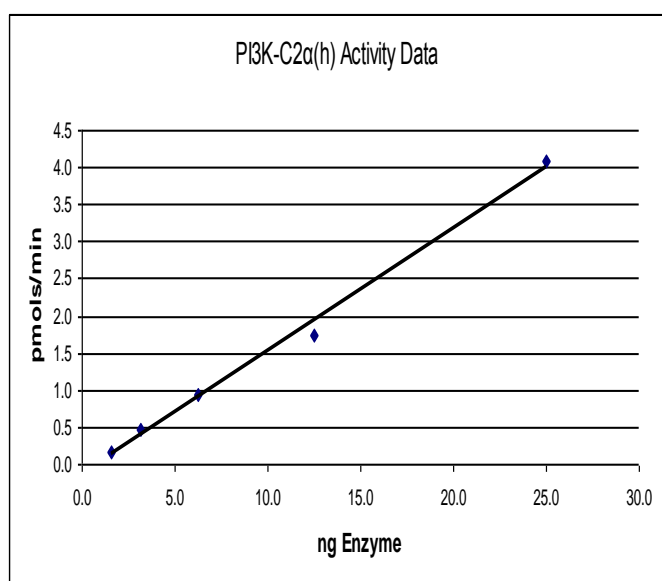
Handling Recommendations: Rapidly thaw the vial under cold water and immediately place on ice. Aliquot unused material into pre-chilled micro-centrifuge tubes and immediately snap-freeze the vials in liquid nitrogen prior to re-storage at -70°C.

**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 MSYHHHHHH DYDIPTTENL YFQGAMLAKD PWDVLLLEER STANCHLERK VNGKSLSVAT
61 VTRSQSLNIR TTQLAKAQGH ISQKDPNGTS SLPTGSSLLQ EVEVQNEEMA AFCRSITKLLK
121 TKFPYTNHRT NPGYLLSPVT AQRNICGENA SVKVSIDIEG FQLPVTFTCD VSSTVEIIM
181 QALCWVHDDL NQVDVGSYVL KVCQGEEVLQ NNHCLGSHEH IQNCRKWDTE IRLQLLTFSA
241 MCQNLARTAE DDETPVDLNK HLYQIEKPKC EAMTRHPVEE LLDSYHNQVE LALQIENQHR
301 AVDQVIKAVR KICSALDQVE TLAITESVKK LKRAVNLPRS KTADVTSLFG GEDTSRSSTR
361 GSLNPENPVQ VSINQLTAAI YDLLRLHANS GRSPTDCAQS SKSVKEAWTT TEQLQFTIFA
421 AHGISSNWVS NYEKYYLICS LSHNGKDLFK PIQSKKVGTY KNFFYLIKWD ELIIFPIQIS
481 QLPLESVLHL TFGILNQSS GSSPDSNKQR KGPEALGKVS LPLDFDKRFL TCGTKLLYLW
541 TSSHTNSVPG TVTKKGYVME RIVLQVDFPS PAFDIIYTTP QVDRSIIQQH NLETLENDIK
601 GKLLDILHKD SSLGLSKEDK AFLWEKRYYC FKHPNCLPKI LASAPNWKWV NLAKTYSLLH
661 QWPALYPLIA LELLDKSFAD QEVRS LAVTW IEAISDDEL TLLPQFVQAL KYEIYLNSSL
721 VQFLLSRALG NIQIAHNLYW LKDALHDVQ FSTRYEHV LG ALLSVGGKRL REELLKQTKL
781 VQLLGGVAEK VRQASGSARQ VVLQRSMERV QSFFQKNKCR LPLKPSLVAK ELNIKSCSFF
841 SNAVPLKVT MVNADPMGEE INVMFKVGED LRQDMLALQM IKIMDKIWLK EGLDLRMVIF
901 KCLSTGRDRG MVELVPASDT LRKIQVEYGV TGSFKDKPLA EWLRYKYPSE EEYEKASENF
961 IYSCAGCCVA TYVLGICDRH NDNIMLRSTG HMFHIDFGKF LGHAQMFSGF KRDRAPFVLT
1021 SDMAYVINGG EKPTIRFQLF VDLCCQAYNL IRKQTNLFLN LLSLMIPSGL PELTSIQDLK
1081 YVRDALQPQT TDAEATIFFT RLISSLGSI ATKFNFFIHN LAQLRFSGLP SNDEPILSFS
1141 PKTYSFRQDG RIKEVSVFTY HKKYNPKHY IYVVRILREG QIEPSFVFRT FDEFQELHNK
1201 LSIIFPLWKL PGFPNRMVLG RTHIKDVA AK RKIELNSYLQ SLMNASTDVA ECDLVCTFFH
1261 PLLRDEKAEG IARSADAGSF SPTPGQIGGA VKLSISYRNG TLFIMVMHIK DLVTEGDGAP
1321 NPYVKTYLLP DNHKTSKRKT KISRKTRNPT FNEMLVYSGY SKETLRQREL QLSVLSAESL
1381 RENFFLGGVT LPLKDFNLSK ETVKQWYQLTA ATYL
  
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Recombinant PI3K-C2 α nucleotide sequence:

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1 atgtcgtact accatcacca tcaccatcac gattacgata tcccaacgac cgaaaacctg
61 tattttcagg gcgccatgct agcaaaggat ccttgggatg ctgttcttct tgaagagaga
121 tcgacagcaa attgtcatct tgaagaagaag gtgaatggaa aatccctttc tgtggcaact
181 gttacaagaa gccagtcctt aaatattcga acaactcagc ttgcaaaaagc ccagggccat
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301 gaagttgaag tacagaatga ggagatggca gctttttgtc gatccattac aaaattgaag
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