

Certificate of Analysis

PIP5K1 γ , active

(Recombinant enzyme expressed in Sf21 insect cells)

Item # 14-845, 14-845-K, 14-845M

Parent Lot # D8NN056N

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 PIP5K1 γ full length. Expressed by baculovirus in Sf21 insect cells. Purified using immobilized metal affinity chromatography. Purity 87% by SDS-PAGE and Coomassie blue staining. MW = 77kDa.

Specific Activity (Parent lot# D8NN056N): 2046U/mg, where one unit of PIP5K1 γ , active activity is defined as 1nmol phosphatidylinositol 4,5-bisphosphate (PIP₂) formed per minute at room temperature with a final ATP concentration of 200 μ M.

Formulation: 2.28mg/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.

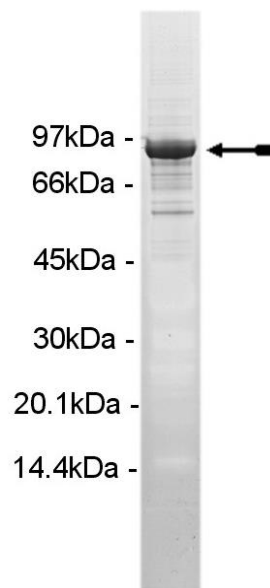
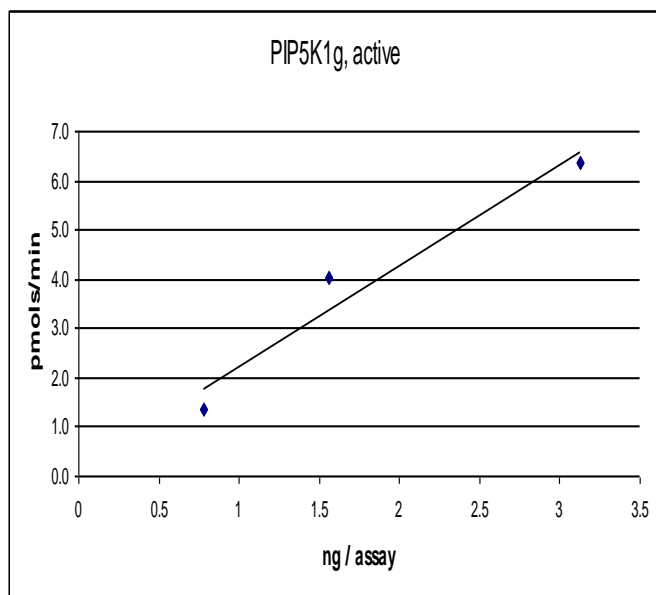
Handling Recommendations: Rapidly thaw the vial under cold water and immediately place on ice. Aliquot unused material into pre-chilled micro-centrifuge tubes and immediately snap-freeze the vials in liquid nitrogen prior to re-storage at -70°C.

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

Quality Control Testing

Kinase Assay: 0.8–3.2ng of this enzyme phosphorylated 25 μ M phosphatidylinositol 5-phosphate (PI5-P) in the assay referenced on page two.

MS Tryptic Fingerprint: Confirmed product identity as PIP5K1 γ with the translated sequence listed on page three.



SDS-PAGE and Coomassie Stain: Purity was assessed by SDS-PAGE and Coomassie blue staining using 3 μ g of PIP5K1 γ , active.

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Eurofins PI4 Kinase Homogeneous Time-resolved Fluorescence (HTRF) PIP4-K Reagent Kits

The following Eurofins kits are suitable for use with this enzyme:

Cat. No	Kit Description
33-054	PIP4-Kinase HTRF Assay (384 wells)
33-055	PIP4-Kinase HTRF Assay (1920 wells)

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PIP5K1γ Sequence Information

Protein	Human PIP5K1γ
Tags	N-terminal 6His
Native sequence	M31 of the recombinant protein is equivalent to M1 of PIP5K1γ.
Accession number	GenBank NM_012398

Recombinant PIP5K1γ amino acid sequence:

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1 MSYYHHHHH DYDIPTTENL YFQGAMDPEF MELEVPDEAE SAEAGAVPSE AAWAAESGAA
61 AGLAQKKAAP TEVLSMTAQP GPGHGKKLGH RGVDASGETT YKKTTSSTLK GAIQLGIGYT
121 VGHLSSKPER DVLMQDFYVV ESIFFPSEGS NLTPAHHFQD FRFKTYAPVA FRYFRELFGI
181 RPDDYLYSLC NEPLIELSNP GASGSLFYVT SDDEFIIKTV MHKEAEFLQK LLPGYMNLN
241 QNPRTLTPKF YGLYCVQSGG KNIRVVVMNN ILPRVVKMHL KFDLKGSTYK RRASKKEKEK
301 SFPTYKDLDF MQDMPEGLLL DADTFSALVK TLQRDCLVLE SFKIMDYSLL LGVHNIDQHE
361 RERQAQGAQS TSDEKRPVGQ KALYSTAMES IQGGAARGEA IESDDTMGGI PAVNGRGERL
421 LLHIGIIDIL QSYRFIKKLE HTWKALVHDG DTVSVHRPSF YAERFFKFMS NTVFRKNSSL
481 KSSPSKKGRG GALLAVKPLG PTAAFSASQI PSEREEAQYD LRGARSYPTL EDEGRPDLLP
541 CTPPSFEEAT TASIATLSS TSLSIPERSP SETSEQPRYR RRTQSSGQDG RPQEEPPAEE
601 DLQQITVQVE PACSVEIVVP KEEDAGVEAS PAGASAAVEV ETASQASDEE GAPASQASDE
661 EDAPATDIYF PTDEERSWVYS PLHYSAQAPP ASDGESDT
  
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Recombinant PIP5K1γ nucleotide sequence:

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1 atgtcgtact accatcacca tcacatcac gattacgata tcccaacgac cgaaaacctg
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1621 tgcacgccac cttctttcga agaagccact acagcctcca ttgccacgac tctgtcatcc
  
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Reviewed and approved by site quality representative.

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