

Certificate of Analysis

PIP5K1γ, 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 PIP5K1γ 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 PIP5K1γ, active activity is defined as 1nmol phosphatidylinositol 4,5-bisphosphate (PIP2) formed per minute at room temperature with a final ATP concentration of 200μM.

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.

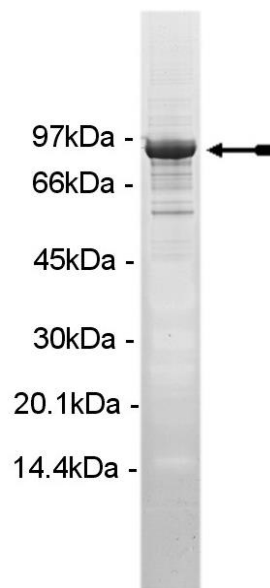
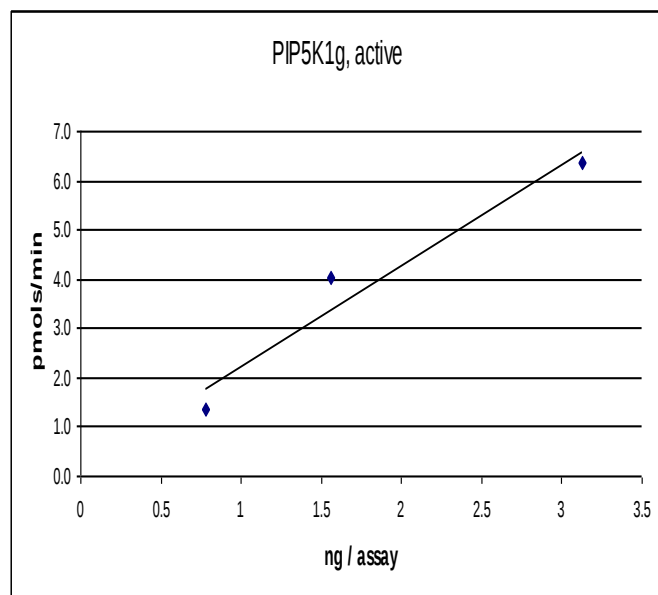
Handling Recommendations: Rapidly thaw the vial under cold water and immediately place on ice. Aliquot unused material into pre-chilled micro-centrifuge tubes and immediately snap-freeze the vials in liquid nitrogen prior to re-storage at -70°C.

**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 25μM phosphatidylinositol 5-phosphate (PI5-P) in the assay referenced on page two.

MS Tryptic Fingerprint: Confirmed product identity as PIP5K1γ with the translated sequence listed on page three.



SDS-PAGE and Coomassie Stain: Purity was assessed by SDS-PAGE and Coomassie blue staining using 3μg of PIP5K1γ, active.

Certificate of Analysis

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)

Certificate of Analysis

PIP5K1 γ Sequence Information

<u>Protein</u>	Human PIP5K1 γ
<u>Tags</u>	N-terminal 6His
<u>Native sequence</u>	M31 of the recombinant protein is equivalent to M1 of PIP5K1 γ .
<u>Accession number</u>	GenBank NM_012398

Recombinant PIP5K1 γ amino acid sequence:

```

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

```

Recombinant PIP5K1 γ nucleotide sequence:

```

1 atgtcgtact accatcacca tcacatcac gattacgata tcccaacgac cgaaaacctg
61 tattttcagg gcgccatgga tccggaattc atggagctgg aggtaccgga cgaggcggag
121 agcgtgagg cgggggccgt gccctcggag gcggcgtggg cggcagagag cggggcggcg
181 gcaggtttg ctcagaagaa ggccggccca acagaggttc tgtccatgac ggcacagccg
241 ggccctggcc atgggaagaa gttgggccat cgagggtgtg acgcatccgg cgaaaccacc
301 tacaagaaga ccacctcctc caccctgaag ggtgccatcc agctgggcat cggctacacc
361 gtgggccacc tgagctcaa gcccgaacgc gacgtgctca tgcaggactt ctactgggtg
421 gagagcatct tcttccccag cgaaggcagc aacctcacc cgcgccacca cttccaggac
481 ttccgcttca agacctatgc acctgtcgcc ttccgctact tccgggagct ctttgggatc
541 cggccagatg attacttgta ctccctgtgc aatgagccgc tgatcgagct gtccaacccg
601 ggccgcatgt gctccctctt ctactgcacc agcgacgacg agttcatcat caagaccgtc
661 atgcacaagg aggcgaggtt cctgcagaag ctgctccctg gctactacat gaacctcaac
721 cagaacccgc ggacgctgct gcccaagttc tatgggctgt actgctgca gtcggggggc
781 aagaacatcc gcgtcgtggt catgaacaac atcctgcccc gcgtggtcaa gatgcacctc
841 aagttcgacc tcaagggtc cactacaag cggcgcgcca gcaagaagga gaaggagaag
901 agcttcccc cctacaagga cctggacttc atgcaggaca tgcccgagg gctcctgctg
961 gacgccgaca ccttcagcgc cctggtcaag acgctgcagc gggactgcct ggtcctggaa
1021 agtttcaaga tcatggacta cagctgctg ctgggctgtg acaacatcga ccagcacgag
1081 cgcgagcggc aggcgcaggc cgcccagagc acctcagatg agaagcggcc tgtgggccag
1141 aaggcgtctt actccacggc catggagtcc atccagggtg gcgccgcgcg cggggaggcc
1201 atcgaatcgg atgacacgat gggcgggatc cccgctgtga acggccgcgg ggagcggctg
1261 ctgctgcaca ttggcatcat cgacatcctg cagtcctaca ggttcatcaa gaaactggag
1321 cacacctgga aggcctcgt ccacgatggg gacacggtgt ccgtccaccg cccagcttc
1381 tatgccgagc gctttttcaa gttcatgagc aacacggtct ttcggaagaa ctcctcctg
1441 aagtcctcgc cctccaagaa ggggcgcggc ggagccttgc tagctgtgaa accgctgggg
1501 cccaccgctg ctttctcggc cagccagatc cctagcgagc gggaggaggc ccagtacgac
1561 ctgccccggg cccgcagcta cccacgctg gaggacgaag gccggcccga cctcctgcc
1621 tgcacgccac cttctttcga agaagccact acagcctcca ttgccacgac tctgtcatcc

```

Certificate of Analysis

```
1681 acatccctct ccattcctga gcggtcccc tcggagacgt cggagcagcc gcggtacagg
1741 cggcgcacac agtcgtctgg acaggatggc aggccgcagg aggagccacc cgcggaagag
1801 gatctgcagc agattacagt gcaggtggag cctgcgtgca gcgtggagat tgtggtcccc
1861 aaagaggagg acgcaggggt ggaggcttcc ccggccggtg cctctgctgc tgttgaagta
1921 gaaactgcca gccaggcctc agacgaggag ggcgcacctg ccagccaggc ctcggacgag
1981 gaggacgcgc ccgccaccga catctacttt cccaccgatg agaggagctg ggtgtactcc
2041 ccgctccact atagcgccca ggcccccccg gcctccgacg gcgagagcga cacataa
```

Reviewed and approved by site quality representative.

Unless otherwise stated in our catalogue or other company documentation accompanying the product(s), our products are intended for research use only and are not to be used for any other purpose, which includes but is not limited to, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses or any type of consumption or application to humans or animals.

© 2014 **Eurofins Pharma Discovery Services UK Limited** is an independent member of Eurofins Discovery Services