

Product Information

**PIP5K1C, active, GST-tagged, human
PRECISIO® Kinase
recombinant, expressed in *Sf9* cells**

Catalog Number **SRP5293**
Storage Temperature -70°C

Synonyms: KIAA0589, LCCS3, PIP5K-GAMMA,
PIP5Kgamma, PIPKlg v4

Product Description

PIP5K1C or phosphatidylinositol-4-phosphate 5-kinase 1 gamma phosphorylates phosphatidylinositol-4-phosphate to form phosphatidylinositol 4,5-bisphosphate. PIP5K1C is found at synapses and has been found to play roles in endocytosis and cell migration. PIP5K1C directly associates with β -catenin and increases β -catenin activity downstream of growth factor stimulation.¹ PIP5K1C expression and kinase activity enhance β -catenin phosphorylation on residues that promote nuclear importation and transcriptional activity. PIP5K1C deficiency impairs neutrophil recruitment as a result of defects in adhesion. PIP5K1C regulated the adhesion through facilitating RhoA GTPase and integrin activation by chemoattractants.²

Recombinant full-length human PIP5K1C was expressed by baculovirus in *Sf9* insect cells using an N-terminal GST-tag. The PIP5K1C gene accession number is NM_012398. It is supplied in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~120 kDa

Kinase activity was determined with a luminescent assay procedure.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at -70°C is recommended. After opening, aliquot into smaller quantities and store at -70°C . Avoid repeated handling and multiple freeze/thaw cycles.

Figure 1.
SDS-PAGE Gel of Typical Lot:
 $\geq 70\%$ (SDS-PAGE, densitometry)

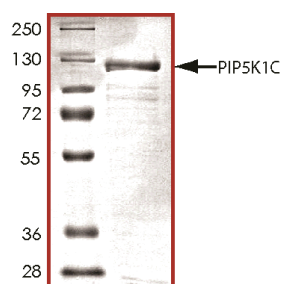
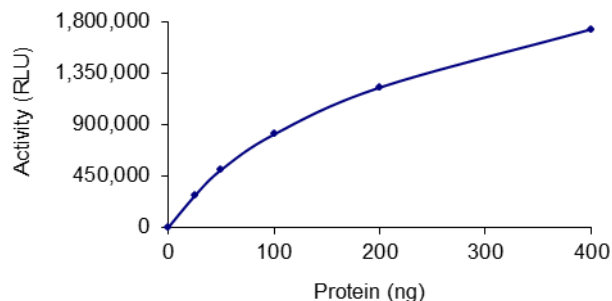


Figure 2.
Specific Activity of Typical Lot:
176–264 nmole/min/mg



References

1. Schramp, M. et al., PIPKly regulates β -catenin transcriptional activity downstream of growth factor receptor signaling. *Cancer Res.*, **71**(4), 1282-91 (2011).
2. Xu, W. et al., Integrin-induced PIP5K1C kinase polarization regulates neutrophil polarization, directionality, and *in vivo* infiltration. *Immunity*, **33**(3), 340-50 (2010).

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