**Product Information**

**PIP5K1A, active, GST-tagged, human**
**PRECISIO® Kinase recombinant, expressed in Sf9 cells**

Catalog Number **SRP5292**

Storage Temperature –70 °C

Synonym: RP11-68I18.9

**Product Description**

PIP5K1A or phosphatidylinositol-4-phosphate 5-kinase 1 alpha phosphorylates phosphatidylinositol-4-phosphate to form phosphatidylinositol 4,5-bisphosphate. PIP5K1 is required for Wnt3a-induced LRP6 phosphorylation at Ser^{1,490} in mammalian cells. Wnt3a stimulates the formation of phosphatidylinositol 4,5-bisphosphates through 'frizzled' and 'dishevelled', the latter of which directly interacts with and activates PIP5K1. PIP5K1A-mediated PIP_{2} production is crucial for HIV-1 entry and the early steps of infection in permissive lymphocytes. Overexpression of wild-type PI4P5K1A increases HIV-1 Env-mediated PIP_{2} production and enhances viral replication in primary lymphocytes.

Recombinant full-length human PIP5K1A was expressed by baculovirus in Sf9 insect cells using an N-terminal GST-tag. The PIP5K1A gene accession number is BC007833. It is supplied in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.2 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ≈86 kDa

**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.

**Kinase activity** was determined with a luminescent assay procedure.

**References**


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