

Product Information

PIK3C2A, active, GST-tagged, human PRECISIO® Kinase recombinant, expressed in Sf9 cells

Catalog Number **SRP5330**
Storage Temperature $-70\text{ }^{\circ}\text{C}$

Synonyms: PI3-K-C2(ALPHA), PI3-K-C2A, DKFZp686L193, CPK, MGC142218

Product Description

PIK3C2A belongs to the phosphoinositide 3-kinase (PI3K) family, which play roles in signaling pathways involved in cell proliferation, oncogenic transformation, cell survival, cell migration, and intracellular protein trafficking. PIK3C2A can phosphorylate phosphatidylinositol and phosphatidylinositol-4-phosphate *in vitro*.¹ PIK3C2A contains a lipid kinase catalytic domain as well as a C-terminal C2 domain, a characteristic of class II PI3-kinases that acts as calcium-dependent phospholipid binding motif that mediates translocation of proteins to membranes and may also mediate protein-protein interactions.²

Recombinant human PIK3C2A (299-end) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST-tag. The gene accession number is NM_002645. 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: ~155 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 Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at $-70\text{ }^{\circ}\text{C}$ is recommended. After opening, aliquot into smaller quantities and store at $-70\text{ }^{\circ}\text{C}$. Avoid repeated handling and multiple freeze/thaw cycles.

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

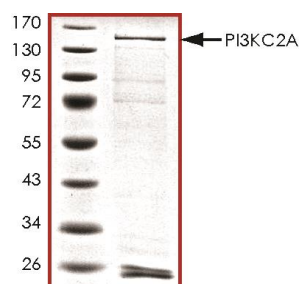
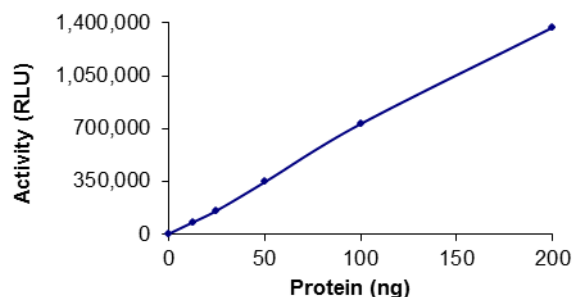


Figure 2.
Specific Activity of Typical Lot:
935–1265 nmol/min/mg



References

1. Domin, J. et al., Cloning of a human phosphoinositide 3-kinase with a C2 domain that displays reduced sensitivity to the inhibitor wortmannin. *Biochem. J.*, **326**, 139-147 (1997).
2. Molz, L. et al., Cpk is a novel class of *Drosophila* PtdIns 3-kinase containing a C2 domain. *J. Biol. Chem.*, **271**, 13892-13899 (1996).

PRECISIO is a registered trademark of Sigma-Aldrich Co. LLC.

AI,RC,MAM 07/17-2