

## Product Information

**PIK3C2G, active, GST-tagged, human  
PRECISIO® Kinase  
recombinant, expressed in Sf9 cells**

Catalog Number **SRP5307**  
Storage Temperature  $-70\text{ }^{\circ}\text{C}$

Synonyms: MGC163149, PI3K-C2GAMMA

### Product Description

PIK3C2G belongs to the phosphoinositide 3-kinase (PI3K) family, which plays main roles in signaling pathways and is involved in cell proliferation, oncogenic transformation, cell survival, cell migration, and intracellular protein trafficking.<sup>1</sup> PIK3C2G contains a lipid kinase catalytic domain as well as a C-terminal C2 domain, a characteristic of class II PI3 kinases that acts as a calcium-dependent phospholipid binding motif, which mediates translocation of proteins to membranes and may also mediate protein-protein interactions. The N-terminal region of PIK3C2G and the C-terminal C2 domain are required for enzymatic activity.<sup>2</sup>

Recombinant human PIK3C2G (468-1203) was expressed by baculovirus in Sf9 insect cells using an N-terminal GST-tag. The gene accession number is BC130277. 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: ~110 kDa

Kinase activity was determined with a luminescent assay procedure.

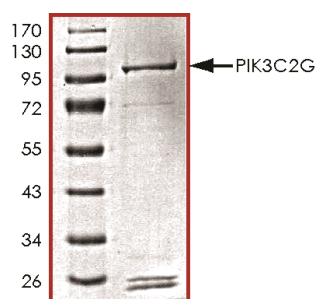
### Precautions and Disclaimer

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.

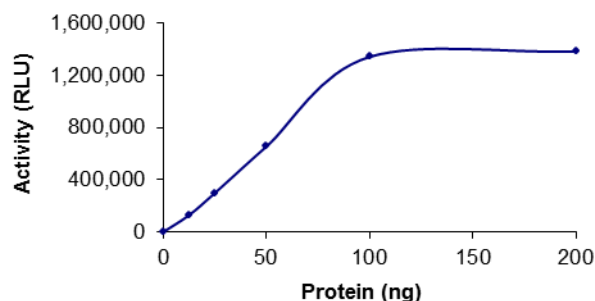
### Storage/Stability

The product ships on dry ice and storage at  $-70\text{ }^{\circ}\text{C}$  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:  
224–336 nmole/min/mg



### References

1. Rozycka, M. et al., cDNA cloning of a third human C2-domain-containing class II phosphoinositide 3-kinase, PI3K-C2-gamma, and chromosomal assignment of this gene (PIK3C2G) to 12p12. *Genomics*, **54**, 569-574 (1998).
2. Misawa, H. et al., Cloning and characterization of a novel class II phosphoinositide 3-kinase containing C2 domain. *Biochem. Biophys. Res. Commun.*, **244**, 531-539 (1998).

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RC,MAM 12/12-1