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Product Information

Phosphoinositide 3-kinase p110γ, human recombinant, expressed in insect cells

Catalog Number **P8615**
Storage Temperature –70 °C

Synonyms: Phosphatidylinositol 3-kinase p110γ, PI3K p110γ

Product Description

Phosphoinositide 3-kinase p110γ is a human recombinant phosphoinositide 3-kinase (PI3K) containing a 6× His-tag at the C-terminus, expressed in insect cells. PI3Ks catalyze the phosphorylation of phosphoinositides at the 3 position of the inositol ring. Phosphoinositide 3-kinase p110γ is the only known class I_B kinase.

PI3Ks are a ubiquitously expressed family of enzymes that, through the generation of phospholipid secondary messengers, play a major role in the regulation of many important cellular processes such as mitogenesis, apoptosis, and cytoskeletal functions.

This product is supplied in a solution containing ~1 mg/ml protein in 10 mM HEPES, pH 7.5, 100 mM NaCl, 0.5 mM $MgCl_2$, and 50% glycerol.

Purity: ≥95% (SDS-PAGE)

Specific activity: ~4.5 units/mg protein

One unit of phosphoinositide 3-kinase p110γ will incorporate 1.0 nmol of phosphate into phophatidyl-inositol per minute using at pH 7.4 at 37 °C.

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 should be stored at –70 °C. Avoid freeze-thaw cycles.

References

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2. Lopez-Ilasaca, M., et al., Linkage of G protein-coupled receptors to the MAPK signaling pathway through PI 3-kinase gamma. Science, **275,** 394-397 (1997).
3. Stoyanov, B., et al., Cloning and characterization of a G protein-activated human phosphoinositide-3 kinase. Science, **269,** 690-693 (1995).
4. Stoyanova, S., et al., Lipid kinase and protein kinase activities of G-protein-coupled phospho-inositide 3-kinase gamma: structure-activity analysis and interactions with wortmannin. Biochem. J., **324,** 489-495 (1997).

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