

PRODUCT INFORMATION



PLC β 3 (Phospho-Ser¹¹⁰⁵)-biotin Peptide (trifluoroacetate salt)

Item No. 44664

Formal Name: N-(5-((3aS,4S,6aR)-2-oxohexahydro-1H-thieno[3,4-d]imidazol-4-yl)pentanoyl)-L-leucyl-L-aspartyl-L-arginyl-L-lysyl-L-arginyl-L-histidyl-L-asparaginy-L-O-phosphono-L-seryl-L-isoleucyl-L-seryl-L-glutamyl-L-alanyl-L-lysyl-L-methionyl-L-arginyl-L-aspartic acid, trifluoroacetate salt

Synonyms: Biotin-PLC β 3-S¹¹⁰⁵ Peptide, Biotin-PLC β 3 (Phospho-Ser¹¹⁰⁵) Peptide

Peptide Sequence: Biotin-LDRKRHN-pS-ISEAKMRD-OH

MF: C₈₉H₁₅₃N₃₂O₃₁PS₂ • XCF₃COOH

FW: 2,262.5

Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

Biotin—Leu—Asp—Arg—Lys—Arg—His—Asn—Ser(PO₃H₂)—Ile—Ser—

Glu—Ala—Lys—Met—Arg—Asp—OH

• XCF₃COOH

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

PLC β 3 (phospho-Ser¹¹⁰⁵)-biotin peptide is supplied as a solid. A stock solution may be made by dissolving the PLC β 3 (phospho-Ser¹¹⁰⁵)-biotin peptide in the solvent of choice, which should be purged with an inert gas. PLC β 3 (phospho-Ser¹¹⁰⁵)-biotin peptide is sparingly soluble (1-10 mg/ml) in DMSO.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of PLC β 3 (phospho-Ser¹¹⁰⁵)-biotin peptide can be prepared by directly dissolving the solid in aqueous buffers. PLC β 3 (phospho-Ser¹¹⁰⁵)-biotin peptide is soluble (≥10 mg/ml) in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day.

Description

PLC β 3 (phospho-Ser¹¹⁰⁵)-biotin peptide is a biotinylated peptide derived from phospholipase C β 3 (PLC β 3) and phosphorylated at the serine in position 1105 (Ser¹¹⁰⁵). PLC β 3 is subject to phosphorylation at Ser¹¹⁰⁵ by PKA and PKG, a modification that inhibits G α_q - and G $\beta\gamma$ -stimulated PLC β 3 activity.^{1,2} This product can be used in the detection of antibodies targeting PLC β 3 (phospho-Ser¹¹⁰⁵) in biological samples.

References

1. Yue, C., Dodge, K.L., Weber, G., *et al.* Phosphorylation of serine 1105 by protein kinase A inhibits phospholipase C β 3 stimulation by G α_q . *J. Biol. Chem.* **273(29)**, 18023-18027 (1998).
2. Xie, C., Bao, Z., Yue, C., *et al.* Phosphorylation and regulation of G-protein-activated phospholipase C- β 3 by cGMP-dependent protein kinases. *J. Biol. Chem.* **276(23)**, 19770-19777 (2001).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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