
Product Data Sheet

Product Name: Syntide 2

Cat. No.: GC33732

Chemical Properties

Cas. No. 108334-68-5

SMILES Pro-Leu-Ala-Arg-Thr-Leu-Ser-Val-Ala-Gly-Leu-Pro-Gly-Lys-Lys

Formula $C_{68}H_{122}N_{20}O_{18}$ M.Wt 1507.82

Solubility Water: Soluble Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure **Background**

Syntide-2 is a synthetic peptide recognized as a substrate by Ca^{2+} /calmodulin-dependent protein kinase II (CaMKII; $K_m = 12 \mu M$).¹ Its sequence is derived from the phosphorylation site 2 on glycogen synthase, a target of CaMKII action.¹ This peptide has been used as a probe to assay CaMKII activity; however, protein kinase C, CaMKV, Raf-1, and other kinases are also known to recognize syntide-2 as a substrate.^{1,2,3,4}

1.Hashimoto, Y., and Soderling, T.R. Calcium calmodulin-dependent protein kinase II and calcium phospholipid-dependent protein kinase activities in rat tissues assayed with a synthetic peptide Arch. Biochem. Biophys. 252(2)418-425(1987) 2.Inoue, S., Mizutani, A., Sugita, R., et al. Purification and characterization of a novel protein activator of Ca^{2+} /calmodulin-dependent protein kinase I Biochem. Biophys. Res. Commun. 215(3)861-867(1995) 3.Kumar, K.A., and Babu, P.P. CaM kinase II-alpha activity, levels and Ca/calmodulin dependent phosphorylation of substrate proteins in mice brain during fatal murine cerebral malaria Neurosci. Lett. 336 121-125(2003) 4.Force, T., Bonventre, J.V., Heidecker, G., et al. Enzymatic characteristics of the c-Raf-1 protein kinase Proc. Natl. Acad. Sci. USA 91 1270-1274(1994)

Caution: Product has not been fully validated for medical applications. For research use only.

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