

Product Data Sheet

Product Name: Cyclo(L-Phe-L-Val)

Cat. No.: GC41555

Chemical Properties

Cas. No. 35590-86-4

SMILES O=C([C@H](C(C)C)N1)N[C@@H](CC2=CC=CC=C2)C1=O

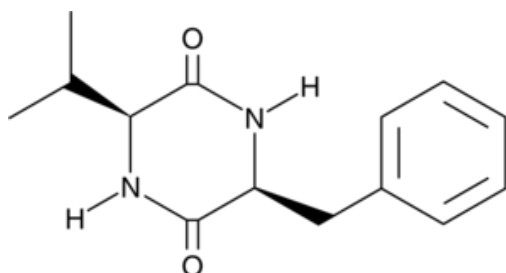
Formula C₁₄H₁₈N₂O₂ M.Wt 246.3

Solubility DMSO : 8.33 mg/mL (33.82 mM); Storage Store at -20°C
Need ultrasonic (<70°C))

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

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

Structure



Background

Cyclo(L-Phe-L-Val) is a metabolite of the sponge bacterium *Pseudoalteromonas* sp. NJ6-3-1 that can autoinduce production of antibacterial substances active against *S. aureus* when co-cultured at a low cell density. It induces neurite outgrowth and branching of chick cortical neurons in vitro when used at concentrations of 16 and 32 µM. It increases phosphorylation of the PI3K substrate Akt, and neurite outgrowth induced by cyclo(L-Phe-L-Val) can be blocked by the PI3K inhibitor LY294002 . Cyclo(L-Phe-L-Val) enhances axon sprouting of calcitonin gene-related protein positive (CGRP+) primary afferents in the spinal cord following crush injury and of serotonin neurons in uninjured spinal cord. Cyclo(L-Phe-L-Val) is also a bitter taste component of cocoa and roasted coffee.

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

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