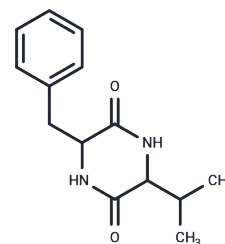


Cyclo(Phe-Val)

Chemical Properties

CAS No. :	14474-71-6
Formula:	C ₁₄ H ₁₈ N ₂ O ₂
Molecular Weight:	246.3
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Cyclo(Phe-Val) is a new cell cycle inhibitor, it shows cytotoxic activity in vitro.
Targets(IC50)	Antibacterial
In vitro	To study the metabolites of mangrove fungus <i>Penicillium oxalicum</i> from the south China sea and search for new anti-tumor compounds. METHODS AND RESULTS: Compounds were isolated by silica gel, ODS column chromatography, Sephadex LH-20 column chromatography and reversed-phase HPLC purification. Structural elucidation was achieved by physico-chemical constants and spectroscopic analysis. MTT assay was used to evaluate the bioactivities in vitro. Six cyclic dipeptides were isolated from the acetone extracts of mycelium of fungus and elucidated as cyclo-(Phe-Ile)(1), Cyclo(Phe-Val)(3), cyclo-(Ile-Leu)(3), cyclo-(Val-Val)(4), cyclo-(Pro-Val)(5), cyclo-(Pro-Gly)(6). Compounds 2,3 and 5 could evidently inhibit the growth of cancer cell lines HepG II and LNCaP at the concentration of 50 µg·mL ⁻¹ . CONCLUSIONS: All of Compounds are obtained from the marine fungus for the first time. Compounds 2,3 and 5 show cytotoxic activity in vitro.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.0601 mL	20.3004 mL	40.6009 mL
5 mM	0.812 mL	4.0601 mL	8.1202 mL
10 mM	0.406 mL	2.030 mL	4.0601 mL
50 mM	0.0812 mL	0.406 mL	0.812 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Cyclic dipeptide constituents from the mangrove fungus *Penicillium oxalicum* Journal of Shenyang Pharmaceutical University, 2007, 24(8):474-8.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481