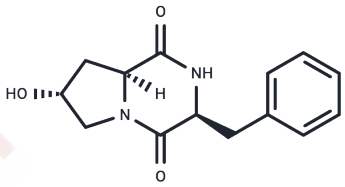
Data Sheet (Cat.No.TN6673)

TargetMol

Cyclo(L-Phe-trans-4-hydroxy-L-Pro)

Chemical Properties



CAS No. : 118477-06-8

Formula: C14H16N2O3

Molecular Weight: 260.29

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(L-Phe-trans-4-hydroxy-L-Pro) (Cyclo(L-phenylalanyl-trans-4-hydroxy-L-proline)) is a natural product found in Phellinus igniarius.
Targets(IC50)	Others,Antifungal
In vitro	We previously identified Streptomyces griseus as an anti-cancer agent (Kim et al., 2014). In this study, we isolated compounds from S. griseus and evaluated their anticancer effect and toxicity in vitro and in vivo. METHODS AND RESULTS: Preparative centrifugal partition chromatography (CPC) was used to obtain three compounds, cyclo(L-[4-hydroxyprolinyl]- L -leucine], Cyclo(L-Phe-trans-4-hydroxy-L-Pro) and phenethyl acetate (PA). We chose PA, which had the highest anticancer activity, as a target compound for further experiments. PA induced the formation of apoptotic bodies, DNA fragmentation, DNA accumulation in G0/G1 phase, and reactive oxygen species (ROS) formation. Furthermore, PA treatment increased Bax/Bcl-xL expression, activated caspase-3, and cleaved poly-ADP-ribose polymerase (PARP) in HL-60 cells. Simultaneous evaluation in vitro and in vivo, revealed that PA exhibited no toxicity in Vero cells and zebrafish embryos. CONCLUSIONS: We revealed, for the first time, that PA generates ROS, and that this ROS accumulation induced the Bcl signaling pathway[1].

Solubility Information

Solubility	DMSO: 50 mg/mL (192.09 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.8419 mL	19.2093 mL	38.4187 mL
5 mM	0.7684 mL	3.8419 mL	7.6837 mL
10 mM	0.3842 mL	1.9209 mL	3.8419 mL
50 mM	0.0768 mL	0.3842 mL	0.7684 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

Evaluation on Anticancer Effect Against HL-60 Cells and Toxicity in vitro and in vivo of the Phenethyl Acetate Isolated from a Marine Bacterium Streptomyces griseus Fisheries & Aquatic Science, 2015 , 18 (1) :35-44.