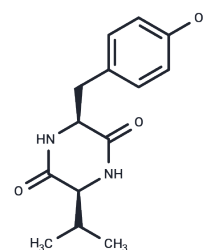


Cyclo(Tyr-Val)

Chemical Properties

CAS No. :	21754-25-6
Formula:	C ₁₄ H ₁₈ N ₂ O ₃
Molecular Weight:	262.3
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Cyclo(Tyr-Val) is a natural product for research related to life sciences. The catalog number is TN6690 and the CAS number is 21754-25-6.
In vitro	In order to provide more natural antifouling compounds, marine bacterium <i>Pseudomonas putida</i> isolated from the sponge <i>Haliclona</i> sp. was explored to test its anti-diatom compounds. METHODS AND RESULTS: The strain was identified by colonial morphology, scanning electron microscope (SEM) and 16S rDNA sequence analysis. The separation procedure was guided by bioactive (Anti-diatom) and chemical (TLC, DAD-HPLC and ¹ H NMR) analysis, and their structures were elucidated by spectrographic techniques. The anti-diatom activity of all purified compounds was assayed. Strain 272 isolated from the sponge <i>Haliclona</i> sp. was identified as <i>Pseudomonas putida</i> . Six diketopiperazine compounds were isolated from the culture of this strain and their structures were determined as cyclo(Leu-Pro) (1), cyclo (Leu-Ala) (2), cyclo(Phe-Ala) (3), Cyclo(Tyr-Val) (4), cyclo(Ala-Tyr) (5), cyclo(Ala-Trp) (6); Compounds 3 and 6 displayed significant anti-diatom activity with the inhibitory rate of 50% and 85% at the concentration of 50 microg/mL, respectively. CONCLUSIONS: The anti-diatom compounds isolated from marine bacterium <i>Pseudomonas putida</i> were cyclo (Phe-Ala) and cyclo (Ala-Trp).

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.8124 mL	19.0621 mL	38.1243 mL
5 mM	0.7625 mL	3.8124 mL	7.6249 mL
10 mM	0.3812 mL	1.9062 mL	3.8124 mL
50 mM	0.0762 mL	0.3812 mL	0.7625 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.

Reference

Anti-diatom compounds from marine bacterium *Pseudomonas putida*. *Acta Microbiologica Sinica*, 2013, 53(8): 825.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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