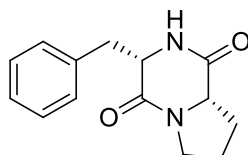


cyclo(L-Phe-L-Pro)

Code No.: **BIA-C1358**

Pack sizes: **5 mg, 25 mg**



Synonyms :

Specifications

CAS #	:	3705-26-8
Molecular Formula	:	C₁₄H₁₆N₂O₂
Molecular Weight	:	244.3
Source	:	<i>Alternaria</i> sp.
Appearance	:	White solid
Purity	:	>95% by HPLC
Long Term Storage	:	-20°C
Solubility	:	Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Cyclo(L-Phe-L-Pro) is a diketopiperazine formed by the fusion of phenylalanine and proline, reported as a secondary metabolite of fungi and bacteria. In *Pseudomonas aeruginosa*, cyclo(L-Phe-L-Pro) is capable of activating N-acylhomoserine lactones (AHLs). Cyclo(L-Phe-L-Pro) is also capable of activating or antagonizing other LuxR-based quorum-sensing systems. While the mode of action of cyclo(L-Phe-L-Pro) is not known, its activity suggests the existence of cross talk among bacterial signalling systems.

References

1. Citromycetins and bilains A-C: new aromatic polyketides and diketopiperazines from Australian marine-derived and terrestrial *Penicillium* spp. Capon R.J. et al., *J. Nat. Prod.* 2007, 70, 1746.
2. Quorum-sensing cross talk: isolation and chemical characterization of cyclic dipeptides from *Pseudomonas aeruginosa* and other Gram-negative bacteria. Holden M.T.G. et al., *Mol. Microbiol.* 1999, 33, 1254.