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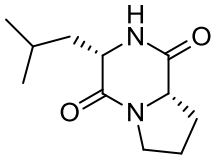
fine chemicals

PRODUCT DATA SHEET

# Cyclo(L-Leu-L-Pro)

Code No.: **BIA-C1710**

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



Synonyms : Cyclo(L-Pro-L-Leu); Cyclo(L-leucyl-L-prolyl); Cyclo(L-prolyl-L-leucyl); Cyclo(Leu-Pro); Cyclo(Pro-Leu); Cyclo(proline-leucine); Cyclo-L-prolyl-L-leucine; Gancidin W; L-Leucyl-L-proline lactam; L-Leucyl-L-prolyl lactam; Maculosin 6; cis-Cyclo(L-Leu-L-Pro)

## Specifications

| | | |
|---|---|---|
| CAS # | : | **2873-36-1** |
| Molecular Formula | : | **$C_{11}H_{18}N_2O_2$** |
| Molecular Weight | : | **210.3** |
| Source | : | ***Alternaria* sp.** |
| Appearance | : | **White solid** |
| Purity | : | **>95% by HPLC** |
| Long Term Storage | : | **-20°C** |
| Solubility | : | **Soluble in ethanol, methanol, DMF or DMSO.** |

## Application Notes

Cyclo(L-Phe-L-Pro) (maculosin 6) is an analogue of a family of diketopiperazine metabolites isolated from a strain of Alternaria alternata as a host-specific phytotoxin for spotted knapweed. Cyclo(L-Phe-L-Pro) occurs in many species of bacteria, actinomycetes and fungi. It was also isolated from a marine tunicate-derived Streptomyces strain in 2011. Cyclo(L-Leu-L-Pro) displays herbicidal and antibiotic activity. Cyclo(L-Leu-L-Pro) is an important chemical and bioassay standard for dereplication of crude microbial extracts and is a useful chemo-taxonomic marker for bacteria, actinomycetes and fungi.

## References


1. Maculosin, a host-specific phytotoxin for spotted knapweed from Alternaria alternata. Stierle A.C. et al., Proc. Natl. Acad. Sci. USA 1988, 85, 8008.
2. Bioactive 2(1H)-pyrazinones and diketopiperazine alkaloids from a tunicate-derived actinomycete Streptomyces sp. Shaala L.A. et al., Molecules 2016, 21, 1116.
3. Chemical constituents and chemotaxonomic study on the marine actinomycete Williamsia sp. MCCC 1A11233. Xie C-L. et al., Biochem. Syst. Ecol. 67, 2016,129.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