

PRODUCT DATA SHEET

cyclo(Δ-Ala-L-Val)

Code: **BIA-C1361**

Pack sizes: 1 mg, 5 mg

Synonyms : -

Specifications

CAS # : 25516-00-1 Molecular Formula : $C_8H_{12}N_2O_2$ Molecular Weight : 168.1 Source : Synthetic Appearance : White solid

Purity : **>98%** Storage : **-20°C**

Solubility : Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

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

References

1. 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.

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