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 $cyclo(\Delta$ -Ala-L-Val)

PRODUCT DATA SHEET

Code No.: BIA-C1361

Pack sizes: 1 mg, 5 mg



Synonyms

Specifications		
CAS #	:	25516-00-1
Molecular Formula	:	C ₈ H ₁₂ N ₂ O ₂
Molecular Weight	:	168.1
Source	:	Synthetic
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(Δ -Ala-L-Val) is a diketopiperazine formed by the fusion of Δ -alanine and valine, 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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