

cyclo(Delta-Ala-L-Val) PRODUCT DATA SHEET

issue date 01/06/2020

Product Name: cyclo(Delta-Ala-L-Val)

Product Number: C220

CAS Number: 25516-00-1 Molecular Formula: $C_8H_{12}N_2O_2$

Molecular Weight: 168.1

Description: 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, $cyclo(\Delta-Ala-L-Val)$ is capable of activating N-acylhomoserine lactones (AHLs). $Cyclo(\Delta-Ala-L-Val)$ is also capable of activating or antagonizing other LuxR-based quorum-sensing systems.

Cyclo(Δ-Ala-L-Val) is soluble in ethanol, methanol, DMF or DMSO. Limited

water solubility

Mechanism of Action: While the mode of action of $cyclo(\Delta-Ala-L-Val)$ is not known, its activity

suggests the existence of cross talk among bacterial signalling systems.

References: 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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