PRODUCT INFORMATION



Lariatin A

Item No. 28165

CAS Registry No.: 732286-09-8

Formal Name: (8→1)-lactam glycyl-L-seryl-L-

glutaminyl-L-leucyl-L-valyl-Ltyrosyl-L-arginyl-L-α-glutamyl-L-tryptophyl-L-valylglycyl-Lhistidyl-L-seryl-L-asparaginyl-Lvalyl-L-isoleucyl-L-lysyl-L-proline

MF: $C_{94}H_{143}N_{27}O_{25}$

FW: 2,051.3 **Purity:** ≥95% Supplied as: A solid -20°C Storage: Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Lariatin A is supplied as a solid. A stock solution may be made by dissolving the lariatin A in the solvent of choice. Lariatin A is soluble in organic solvents such as methanol, which should be purged with an inert gas. Lariatin A is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Lariatin A is an antimycobacterial lasso peptide originally isolated from R. jostii. 1 It is active against M. tuberculosis and M. smegmatis in vitro (MICs = 0.39 and 0.1 μg/ml, respectively).^{1,2} Lariatin A increases survival in a silkworm model of M. smegmatis infection (ED₅₀ = 0.5 μ g/g).

References

- 1. Iwatsuki, M., Uchida, R., Takakusagi, Y., et al. Lariatins, novel anti-mycobacterial peptides with a lasso structure, produced by Rhodococcus jostii K01-B0171. J. Antibiot. (Tokyo) 60(6), 357-363 (2007).
- Yagi, A., Uchida, R., Hamamoto, H., et al. Anti-Mycobacterium activity of microbial peptides in a silkworm infection model with Mycobacterium smegmatis. J. Antibiot. (Tokyo) 70(5), 685-690 (2017).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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