

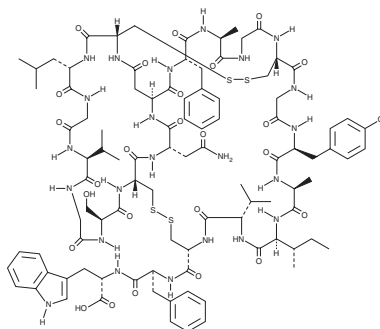
# PRODUCT INFORMATION



## Siamycin I

Item No. 27783

**CAS Registry No.:** 164802-68-0  
**Synonyms:** BMY 29304, FR 901724  
**MF:** C<sub>97</sub>H<sub>131</sub>N<sub>23</sub>O<sub>26</sub>S<sub>4</sub>  
**FW:** 2,163.5  
**Purity:** ≥85%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Bacterium/*Streptomyces* sp.



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

### Laboratory Procedures

Siamycin I is supplied as a solid. A stock solution may be made by dissolving the siamycin I in the solvent of choice, which should be purged with an inert gas. Siamycin I is soluble in organic solvents such as methanol and DMSO.

### Description

Siamycin I is a tricyclic peptide originally isolated from *Streptomyces* and has antiviral and antibacterial activities.<sup>1,2</sup> It is active against laboratory strains and clinical isolates of HIV-1 (ED<sub>50</sub>s = 0.05-0.45 and 0.89-5.7 μM, respectively), as well as the CBL-20 strain of HIV-2 (ED<sub>50</sub> = 0.45 μM), *in vitro*.<sup>1</sup> Siamycin I inhibits HIV-induced fusion of C8166 T cells with HIV-1-infected CEM-SS cells with an ED<sub>50</sub> value of 0.08 μM. It is also active against *B. subtilis*, *M. luteus*, and *S. aureus* (MICs = 1.6-6.3 μg/ml).<sup>2</sup> Siamycin I inhibits autophosphorylation of the *E. faecalis* quorum sensing kinase FsrC induced by gelatinase biosynthesis-activating pheromone (GBAP).<sup>3</sup>

### References

1. Lin, P.F., Samanta, H., Bechtold, C.M., *et al.* Characterization of siamycin I, a human immunodeficiency virus fusion inhibitor. *Antimicrob. Agents Chemother.* **40(1)**, 133-138 (1996).
2. Tsunakawa, M., Hu, S.L., Hoshino, Y., *et al.* Siamycins I and II, new anti-HIV peptides: I. Fermentation, isolation, biological activity and initial characterization. *J. Antibiot. (Tokyo)* **48(5)**, 433-434 (1995).
3. Ma, P., Nishiguchi, K., Yuille, H.M., *et al.* Anti-HIV siamycin I directly inhibits autophosphorylation activity of the bacterial FsrC quorum sensor and other ATP-dependent enzyme activities. *FEBS Lett.* **585(17)**, 2660-2664 (2011).

#### WARNING

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

#### SAFETY DATA

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.

#### WARRANTY AND LIMITATION OF REMEDY

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