

# PRODUCT INFORMATION



## Actagardin

Item No. 19940

CAS Registry No.: 59165-34-3

Formal Name: D-cysteinyl-L-serylglycyl-L-tryptophyl-L-valyl-L-cysteinyl-(2S,3S)-2-amino-3-mercaptopropanoyl-L-leucyl-(2S,3S)-2-amino-3-mercaptopropanoyl-L-isoleucyl-L- $\alpha$ -glutamyl-L-cysteinylglycyl-(2S,3S)-2-amino-3-mercaptopropanoyl-L-valyl-L-isoleucyl-L-cysteinyl-L-alanyl-L-cysteine, cyclic (1 $\rightarrow$ 6),(7 $\rightarrow$ 12),(9 $\rightarrow$ 17),(14 $\rightarrow$ 19)-tetrakis(thioether) S<sup>14</sup>-oxide

Synonyms: Antibiotic A 3802-IV-3, Gardimycin

MF: C<sub>81</sub>H<sub>124</sub>N<sub>20</sub>O<sub>24</sub>S<sub>4</sub>

FW: 1,890.2

Purity:  $\geq$ 98%

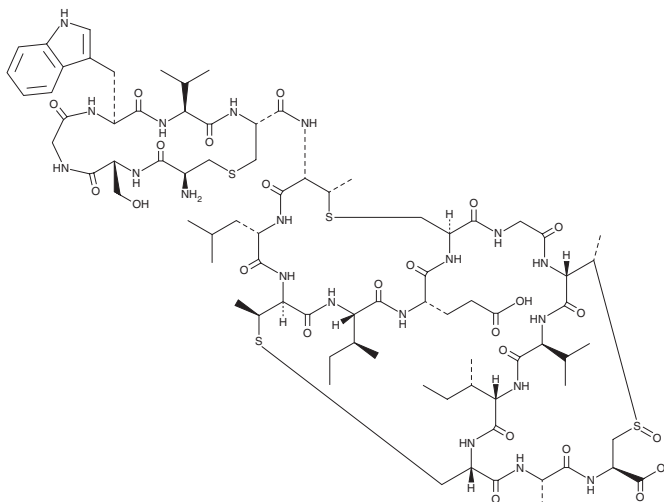
Supplied as: A solid

Storage: -20°C

Stability:  $\geq$ 4 years

Item Origin: Bacterium/*Actinoplanes* sp.

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



### Laboratory Procedures

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

### Description

Actagardin is a tetracyclic lantibiotic produced by several species of *Actinoplanes*.<sup>1</sup> It is composed of macrocyclic rings formed by thioether bridges.<sup>1</sup> Actagardin preferably targets Gram-positive bacteria, inhibiting the synthesis of peptidoglycan.<sup>1</sup>

### Reference

1. Brötz, H. and Sahl, H.-G. New insights into the mechanism of action of lantibiotics--diverse biological effects by binding to the same molecular target. *J. Antimicrob. Chemother.* **46(1)**, 1-6 (2000).

#### 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.

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