

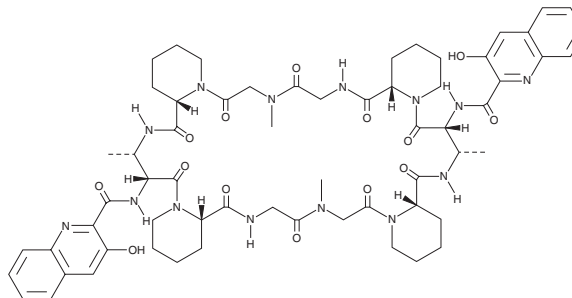
# PRODUCT INFORMATION



## Quinaldopeptin

Item No. 28167

CAS Registry No.: 130743-07-6  
MF: C<sub>62</sub>H<sub>78</sub>N<sub>14</sub>O<sub>14</sub>  
FW: 1,243.4  
Purity: ≥95%  
Supplied as: A powder  
Storage: -20°C  
Stability: ≥4 years



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

### Laboratory Procedures

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

Quinaldopeptin 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

Quinaldopeptin is a quinomycin antibiotic.<sup>1</sup> It is active against a variety of bacteria, including *S. pyogenes*, *S. aureus*, *C. perfringens*, *S. faecalis*, *E. coli*, and *K. pneumoniae* (MICs = 0.2, 0.4, 0.8, 1.6, 3.1, and 6.3 µg/ml, respectively). It is cytotoxic to B16/F10 and Moser cells (IC<sub>50</sub>s = 0.0008 and 0.04 µg/ml, respectively) and increases survival in a P388 leukemia mouse model. Quinaldopeptin is a bis-intercalator depsipeptide (NPBID) that binds to and intercalates into DNA (K<sub>d</sub> = 32 nM).<sup>2</sup>

### References

1. Toda, S., Sugawara, K., Ohbayashi, M., *et al.* Quinaldopeptin, a novel antibiotic of the quinomycin family. *J. Antibiot. (Tokyo)* **43(7)**, 796-808 (1990).
2. Ratnayake, A.S., Chang, L.-P., Tumey, L.N., *et al.* Natural product bis-intercalator depsipeptides as a new class of payloads for antibody-drug conjugates. *Bioconjug. Chem.* **30(1)**, 200-209 (2019).

#### 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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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM