

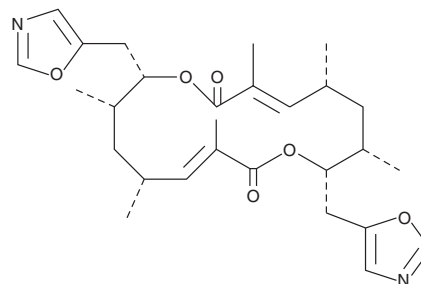
PRODUCT INFORMATION



Conglobatin

Item No. 21766

CAS Registry No.: 72263-05-9
Formal Name: (3E,5R,11E)-3,5,7S,11,13R,15S-hexamethyl-8S,16S-bis(5-oxazolymethyl)-1,9-dioxacyclohexadeca-3,11-diene-2,10-dione
MF: C₂₈H₃₈N₂O₆
FW: 498.6
Purity: ≥85%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Bacterium/*Streptomyces conglobatus*



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

Laboratory Procedures

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

Description

Conglobatin is a dimeric macrolide dilactone originally isolated from *S. conglobatus*.¹ It disrupts binding of heat shock protein 90 (Hsp90) to the co-chaperone Cdc37 complex and induces downregulation of client protein expression in SK-BR-3 breast cancer cells.² It also inhibits cell proliferation in HER2⁺ breast cancer cell lines (IC₅₀s = 12.9-61.5 μM, respectively) and decreases the number of invasive cells *in vitro*.^{2,3} When combined with lapatinib (Item No. 11493), tumor growth of SK-BR-3 mouse xenografts was reduced to a greater degree than with conglobatin alone.⁴ Conglobatin has various anticancer effects in esophageal squamous cell carcinoma (ESCC) models as well, including an inhibition of cell proliferation in KYSE510 cells (IC₅₀ = 9.31 μM).⁵ It also inhibits β1 integrin activation leading to a loss of cellular adhesion.

References

1. Westley, J.W., Liu, C-M., Evans, R.H., *et al.* *J. Antibiot. (Tokyo)* **32(9)**, 874-877 (1979).
2. Huang, W., Ye, M., Zhang, L-r., *et al.* *Mol. Cancer*. **13**, 150 (2014).
3. Najumudeen, A.K., Jaiswai, A., Lectez, B., *et al.* *Oncogene* **35(40)**, 5248-5262 (2016).
4. Huang, W., Wu, Q-d., Zhang, M., *et al.* *Cancer Lett.* **356(2 Pt B)**, 862-871 (2015).
5. Li, L-Y., Jiang, H., Xie, Y-M., *et al.* *Oncotarget* **6(18)**, 15940-15952 (2015).

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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