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

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
Buyer agrees to purchase the material subject to Cayman’s Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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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-oxazolylmethyl)-1,9-dioxacyclohexadeca-3,11-diene-2,10-dione
MF: C_{28}H_{38}N_{2}O_{6}
FW: 498.6
Purity: ≥ 98%
Supplied as: A solid
Storage: -20°C
Stability: ≥ 2 years

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. Conglobatin is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide, which should be purged with an inert gas.

Conglobatin 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

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 (IC_{50}s = 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 (IC_{50} = 9.31 µM).5 It also inhibits β1 integrin activation leading to a loss of cellular adhesion.

References