

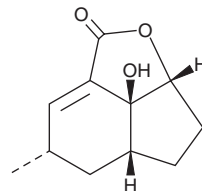
PRODUCT INFORMATION



Galiellalactone

Item No. 15387

CAS Registry No.: 133613-71-5
Formal Name: (7bS)-5,5aR,6,7,7aR,7b-hexahydro-7b-hydroxy-4S-methyl-indeno[1,7-bc]furan-2(4H)-one
MF: C₁₁H₁₄O₃
FW: 194.2
Purity: ≥95%
Supplied as: A lyophilized 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

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

Description

Galiellalactone is a fungal metabolite isolated from the ascomycetes *G. rufa* strain A75-86 and A111-95 that inhibits IL-6-mediated JAK/STAT signal transduction in HepG2 cells with an IC₅₀ value of 0.25-0.5 μM.¹ The selectivity of this compound is achieved by its ability to block the binding of activated STAT3 dimers to their DNA binding sites without affecting phosphorylation of the STAT3 transcription factor.¹ At 10-50 μM, galiellalactone exhibits dose-dependent growth inhibitory effects on prostate cancer stem cell-like cells expressing active STAT3, suggesting it may be a useful therapeutic approach to control JAK/STAT signaling.²

References

1. Weidler, M., Rether, J., Anke, T., *et al.* Inhibition of interleukin-6 signaling by galiellalactone. *FEBS Lett.* **484(1)**, 1-6 (2000).
2. Hellsten, R., Johansson, M., Dahlman, A., *et al.* Galiellalactone inhibits stem cell-like ALDH-positive prostate cancer cells. *PLoS One* **6(7)**, e221188 (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

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.

Copyright Cayman Chemical Company, 10/25/2022

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