

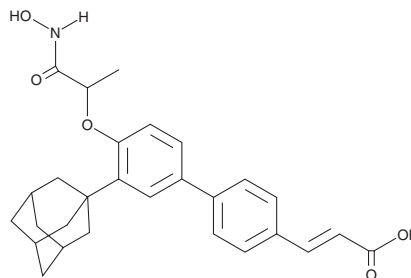
PRODUCT INFORMATION



GEM144

Item No. 44647

CAS Registry No.: 2487526-28-1
Formal Name: (2E)-3-[4'-[2-(hydroxyamino)-1-methyl-2-oxoethoxy]-3'-tricyclo[3.3.1.1^{3,7}]dec-1-yl[1,1'-biphenyl]-4-yl]-2-propenoic acid
MF: C₂₈H₃₁NO₅
FW: 461.6
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

GEM144 is supplied as a solid. A stock solution may be made by dissolving the GEM144 in the solvent of choice, which should be purged with an inert gas. GEM144 is sparingly soluble (1-10 mg/ml) in ethanol and DMSO.

Description

GEM144 is a dual inhibitor of DNA polymerase α (POLA1) and histone deacetylase 11 (HDAC11).¹ It inhibits the primer extension activity of POLA1 in a cell-free assay when used at concentrations ranging from 10 to 50 μ M and increases acetylation of α -tubulin at lysine 40 in H460 lung cancer cells at 0.4 μ M. It inhibits proliferation in a panel of cancer cell lines, including three malignant melanoma (IC₅₀s = 0.73-1.4 μ M), six hematological (IC₅₀s = 0.16-3.2 μ M), one breast cancer (IC₅₀ = 0.77 μ M), and one glioma cell line (IC₅₀ = 1 μ M). GEM144 (50 mg/kg) reduces tumor growth in an H460 mouse xenograft model and an MM487 orthotopic, malignant pleural mesothelioma xenograft model.

Reference

1. Dallavalle, S., Musso, L., Cincinelli, R., et al. Antitumor activity of novel POLA1-HDAC11 dual inhibitors. *Eur. J. Med. Chem.* **228**, 113971 (2022).

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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