

PRODUCT INFORMATION

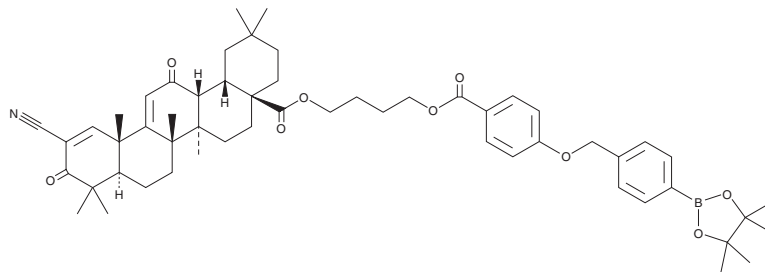


CDDO Borate Prodrug 4

Item No. 42718

CAS Registry No.: 2763063-09-6
Formal Name: 2-cyano-3,12-dioxo-oleana-1,9(11)-dien-28-oic acid, 4-[[[4-[[4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)phenyl]methoxy]benzoyl]oxy]butyl ester

MF: C₅₅H₇₀BNO₉
FW: 900.0
Purity: ≥95%
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

CDDO borate prodrug 4 is supplied as a solid. A stock solution may be made by dissolving the CDDO borate prodrug 4 in the solvent of choice, which should be purged with an inert gas. CDDO borate prodrug 4 is soluble (≥10 mg/ml) in DMSO. CDDO borate prodrug 4 is sparingly soluble (1-10 mg/ml) in ethanol.

Description

CDDO borate prodrug 4 is an anticancer agent and a prodrug form of a CDDO derivative with anticancer activity.¹ It is converted to the CDDO derivative by reactive oxygen species (ROS). CDDO borate prodrug 4 selectively inhibits the proliferation of BGC-823 gastric cancer cells in the presence of hydrogen peroxide (H₂O₂) over GES-1 gastric epithelial cells (IC₅₀s = 1.2 and 4.8 μM, respectively). Unlike the active metabolite, CDDO borate prodrug 4 does not affect the oxidized glutathione (GSSG) to reduced glutathione (GSH) ratio, indicating a low toxicity risk, in BGC-823 cells when used at a concentration five-fold higher than the active metabolite. *In vivo*, CDDO borate prodrug 4 (5 mg/kg) induces tumor regression and does not decrease body weight or induce organ toxicity in a BGC-823 mouse xenograft model.

Reference

1. Li, N., Wang, J., Zhang, L., *et al.* New CDDO arylboronate ester derivatives with high selectivity and low toxicity. *J. Med. Chem.* **67**(16), (2024).

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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