

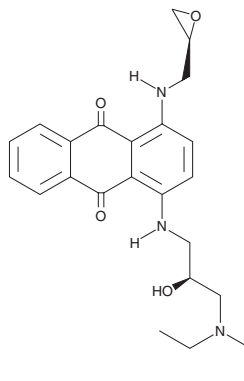
PRODUCT INFORMATION



BDA-366

Item No. 35420

CAS Registry No.: 1909226-00-1
Formal Name: 1-[[[(2S)-3-(diethylamino)-2-hydroxypropyl]amino]-4-[[[(2S)-2-oxiranylmethyl]amino]-9,10-anthracenedione
MF: C₂₄H₂₉N₃O₄
FW: 423.5
Purity: ≥98%
UV/Vis.: λ_{max}: 255, 590, 635 nm
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

BDA-366 is supplied as a solid. A stock solution may be made by dissolving the BDA-366 in the solvent of choice, which should be purged with an inert gas. BDA-366 is soluble in the organic solvent DMSO at a concentration of approximately 2 mg/ml.

Description

BDA-366 is an antagonist of the BH4 domain of the anti-apoptotic protein Bcl-2 ($K_i = 3.3$ nM).¹ It is selective for Bcl-2 over Bcl-xL, Mcl-1, A1/Bfl-1, and Bcl-2 lacking the BH4 domain (K_i s = >500, >500, >500, and 654.8 nM, respectively) but does bind to BH1-, BH2-, or BH3 domain-deficient Bcl-2 (K_i s = 12.4, 7.6, and 23.4 nM, respectively). However, BDA-366 (10 μM) induces Bax activation in HT cells, which lack endogenous Bcl-2, and in HT cells overexpressing Bcl-2, indicating a context-specific Bcl-2-independent mechanism of cell death.² BDA-366 is cytotoxic against a panel of non-small cell lung cancer (NSCLC) and SCLC cell lines (IC_{50} s = 0.2-1.73 μM).¹ It also reduces tumor growth and induces tumoral caspase-3 activation in an H460 lung cancer mouse xenograft model when administered at doses of 10, 20, and 30 mg/kg.²

References

1. Han, B., Park, D., Li, R., *et al.* Small-molecule Bcl2 BH4 antagonist for lung cancer therapy. *Cancer Cell* **27(6)**, 852-863 (2015).
2. Vervloessem, T., Sasi, B.K., Xerxa, E., *et al.* BDA-366, a putative Bcl-2 BH4 domain antagonist, induces apoptosis independently of Bcl-2 in a variety of cancer cell models. *Cell Death Dis.* **11(9)**, 769 (2020).

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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