

Product Data Sheet

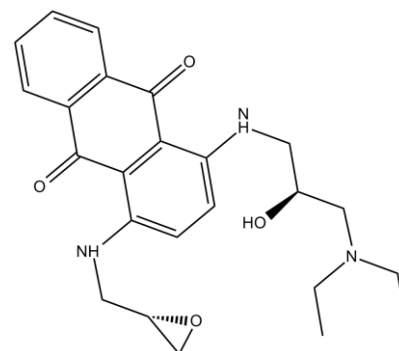
Chemical Properties

Product Name: BDA-366

Cas No.:

M.Wt: 423.50

Formula: C₂₄H₂₉N₃O₄



Chemical Name: 1-(((S)-3-(diethylamino)-2-hydroxypropyl)amino)-4-(((S)-oxiran-2-yl methyl)amino)anthracene-9,10-dione

Canonical SMILES: CCN(CC)C[C@@H](O)CNC1=CC=C(NC[C@@H]2OC2)C3=C1C(C4=C(C3=O)C=CC=C4)=O

Solubility: Soluble in DMSO

Storage: Store at -20°C

General tips: For obtaining a higher solubility , please warm the tube at 37° C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20° C for several months.

Shopping Condition: Evaluation sample solution : ship with blue ice
All other available size: ship with RT , or blue ice upon request

Biological Activity

Targets : Apoptosis

Pathways: Bcl-2 Family

Description:

BDA-366 is a selective antagonist of BCL2 BH4 domain with Ki value of 3.3 nM [1]. BCL2 is an important anti-apoptotic protein. BCL2 homology 4 (BH4) domain is required for its antiapoptotic function, thus acts as a promising anticancer target [1]. BDA-366 is a selective BCL2 inhibitor. BDA-366 induced conformational change of BCL2 that exposed the BH3 domain, resulting in abrogation of its prosurvival function and conversion of

BCL2 to a prodeath protein. In non-small cell lung cancer (NSCLC) and small cell lung cancer (SCLC) cells, BDA-366 selectively bound to BCL2 with high affinity. BDA-366 induced apoptosis by BCL2-dependent BAX activation and cytochrome c release. In H460 cells, BDA-366 reduced Bcl2/IP3R binding, which then increased Ca²⁺ release [1].

In mice bearing H460 lung cancer xenografts, treatment with BDA-366 (0, 10, 20, and 30 mg/kg/day) via i.p. route for 14 days induced apoptosis and potently inhibited tumor growth in a dose-dependent way. There was no significant toxicity at the maximum therapeutic dose. In tumor tissue from patients with NSCLC, BDA-366 synergized with RAD001 and resulted in significantly greater inhibition of lung cancer growth compared with either agent alone [1].

Reference:

[1]. Han B, Park D, Li R, et al. Small-Molecule Bcl2 BH4 Antagonist for Lung Cancer Therapy. *Cancer Cell*, 2015, 27(6): 852-863.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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