Product Data Sheet

Product Name: BDA-366
Cat. No.: GC10721

Chemical Properties

Cas. No.	1909226-00-1		
Chemical Name	1-(((S)-3-(diethylamino)-2-hydroxypropyl)amino)-4-(((S)-oxiran-2-ylmethyl)amino)anthracene-9,10-dione		
SMILES	CCN(CC)C[C@@H](O)CNC1=CC=C(NC[C@@H]2OC2)C3=C1C(C4=C(C3=O)C=CC=C4)=O		
Formula	$C_{24}H_{29}N_3O_4$	M.Wt	423.50
Solubility	Soluble in DMSO	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure	BDA-366		

Background

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

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

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.