

Product Data Sheet

Product Name: B I09
Cat. No.: GC33406

Chemical Properties

Cas. No. 1607803-67-7

SMILES OC1=CC=C(C2=C(CNCC2)C3=O)C(O3)=C1C4OCCCCO4

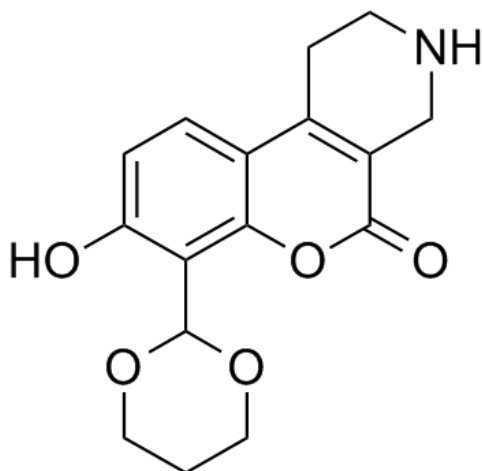
Formula $C_{16}H_{17}NO_5$ M.Wt 303.31

Solubility DMSO: 8.33 mg/mL (27.46 mM) Storage 4°C, protect from light

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.

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

Structure



Protocol

Animal experiment: Mice[2] Mice are intraperitoneally injected with B I09 (50 mg/kg) on the first 5 days of each week for 3 weeks[2].

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

References:

- [1]. Ranatunga S, et al. Synthesis of novel tricyclic chromenone-based inhibitors of IRE-1 RNase activity. J Med Chem. 2014 May 22;57(10):4289-301.
- [2]. Tang CH, et al. Inhibition of ER stress-associated IRE-1/XBP-1 pathway reduces leukemic cell survival. J Clin Invest. 2014 Jun;124(6):2585-98.

Background

B I09 is an IRE-1 RNase inhibitor, with an IC₅₀ of 1230 nM.

B I09 is an IRE-1 RNase inhibitor, with an IC₅₀ of 1230 nM[1]. Treatment of CLL cells with this inhibitor (B I09) mimick XBP-1 deficiency, including upregulation of IRE-1 expression and compromised BCR signaling. B I09 is highly effective in inhibiting splicing of XBP1 mRNA in human WaC3 cells and the expression of XBP-1s in LPS stimulated B cells[2].

B I09 has a half-life of approximately 1.5 hours and reaches its peak concentration of approximately 39 µM in mouse plasma serum 15 minutes after administration. Administration of B I09 to CLL tumor-bearing mice suppress leukemic progression by inducing apoptosis and do not cause systemic toxicity[2].

- [1]. Ranatunga S, et al. Synthesis of novel tricyclic chromenone-based inhibitors of IRE-1 RNase activity. J Med Chem. 2014 May 22;57(10):4289-301. [2]. Tang CH, et al. Inhibition of ER stress-associated IRE-1/XBP-1 pathway reduces leukemic cell survival. J Clin Invest. 2014 Jun;124(6):2585-98.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA