

Product Data Sheet

Product Name: Diflapolin

Cat. No.: GC43453

Chemical Properties

Cas. No. 724453-98-9

SMILES CC1=C(NC(NC2=CC(Cl)=C(Cl)C=C2)=O)C=CC(OCC3=NC4=C(C=CC=C4)S3)=C1

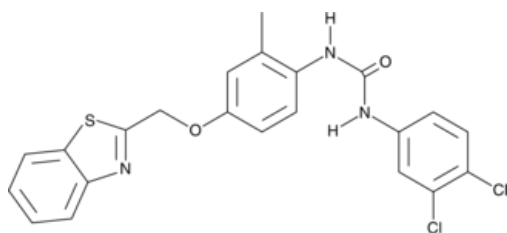
Formula C₂₂H₁₇Cl₂N₃O₂S M.Wt 458.4

Solubility DMF: 2.5mg/mL, DMSO: 1.6mg/mL 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.

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

Structure



Background

Diflapolin is a dual inhibitor of 5-lipoxygenase-activating protein (FLAP) and soluble epoxide hydrolase (sEH). It inhibits formation of the 5-lipoxygenase (5-LO) products leukotriene B₄ and 5-HpETE in isolated human monocytes and neutrophils (IC₅₀s = 30 and 170 nM, respectively) and inhibits the epoxide hydrolase activity of sEH with an IC₅₀ value of 20 nM in a cell-free assay. It is selective for FLAP and sEH over other arachidonic acid metabolism enzymes, including 5-LO, LTC₄ synthase, mPGES-1, COX-1, or COX-2 in cell-free assays, as well as 12- and 15-LO in neutrophils. Diflapolin (1, 3, and 10 mg/kg) decreases inflammation in a mouse model of peritonitis induced by zymosan, reducing the production of LTB₄ and LTC₄ and inhibiting leukocyte recruitment.

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