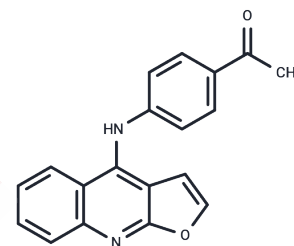


CIL-102

Chemical Properties

CAS No. : 479077-76-4
 Formula: C₁₉H₁₄N₂O₂
 Molecular Weight: 302.327
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
 Actual storage temperature shall be subject to the COA.



Biological Description

Description	CIL-102 is an apoptosis inducer that functions as an MMP-2/MMP-9 inhibitor, effectively reducing both the protein expression and mRNA levels of MMP-2/MMP-9. CIL-102 also demonstrates anticancer activity.
Targets(IC50)	Apoptosis, MMP
In vitro	CIL-102 activates JNK and p38 MAPK in human leukemia K562 cells while reducing phosphorylated ERK levels. The activation of p38 MAPK/JNK by CIL-102 leads to the downregulation of tetratricopeptide (TTP) mediated by protein phosphatase 2A. Additionally, it decreases invasion and MMP-2/MMP-9 expression in breast and liver cancer cells [1]. In DLD-1 cells, CIL-102 induces an extrinsic apoptotic pathway in a time-dependent manner by activating Fas-L, caspase-8, and inducing Bid cleavage and cytochrome c release. Apoptosis and G2/M arrest are mediated via the phosphorylation of the JNK1/2 signaling pathway, resulting in altered levels of NFκB p50, p300, and CREB binding protein (CBP), along with the induction of p21 and GADD45 and reduced association of cdc2/cyclin B. Overall, CIL-102 induces cell cycle arrest and apoptosis in colon cancer cells by upregulating p21 and GADD45 expression and activating JNK1/2, NFκB p50, and p300 [2].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3076 mL	16.5382 mL	33.0764 mL
5 mM	0.6615 mL	3.3076 mL	6.6153 mL
10 mM	0.3308 mL	1.6538 mL	3.3076 mL
50 mM	0.0662 mL	0.3308 mL	0.6615 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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