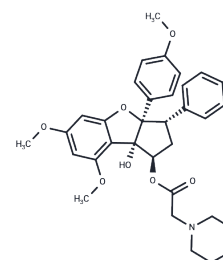


A2073

Chemical Properties

CAS No. : 2834742-70-8
 Formula: C33H37NO7
 Molecular Weight: 559.65
 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	A2073 is a flavonoid derivative that inhibits the proliferation of erythroleukemia cells by inducing cell cycle arrest and suppressing the MAPK, NF-κB, and PI3K signaling pathways. It forms stable interactions with cell cycle-related proteins (CDK1, CCNA2, PRIM1). In a zebrafish xenograft tumor model, A2073 demonstrates significant anti-tumor cell proliferation activity while maintaining low toxicity. A2073 is suitable for research in acute erythroleukemia.
Targets(IC50)	NF-κB, Akt, p38 MAPK, PI3K
In vitro	A2073, at concentrations of 25-100 nM over 24-72 hours, effectively inhibits the proliferation of HEL and K562 cells in a dose- and time-dependent manner, with IC50 values of 55.02 nM for HEL and 77.07 nM for K562. This compound decreases the number of HEL cells without significantly increasing apoptosis, induces erythroid differentiation in HEL cells (indicated by increased CD71 expression), and causes cell cycle arrest while downregulating key cell cycle regulatory proteins. A2073 also downregulates essential proteins in the MAPK (RAS, RAF, MAPK, MEK, PI3K-AKT (PI3K, AKT)) and NF-κB (p-NF-κB, p-IκBα) signaling pathways after 48 hours of exposure. Additionally, it forms stable interactions with cell cycle-related proteins (CDK1, CCNA2, PRIM1).
In vivo	A2073 (25-100 nM, 1-5 days) effectively inhibits the proliferation of HEL cells in a zebrafish xenograft tumor model.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7868 mL	8.9342 mL	17.8683 mL
5 mM	0.3574 mL	1.7868 mL	3.5737 mL
10 mM	0.1787 mL	0.8934 mL	1.7868 mL
50 mM	0.0357 mL	0.1787 mL	0.3574 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

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481