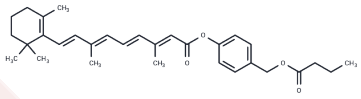
Data Sheet (Cat.No.T35629)

TargetMol

ATRA-BA Hybrid

Chemical Properties



CAS No. : 1037543-26-2

Formula: C31H40O4

Molecular Weight: 476.65

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	ATRA-BA hybrid is a mutual prodrug form of all-transretinoic acid and butyric acid . 1ATRA-BA hybrid is cleaved to release ATRA and BA in isolated mouse plasma. It inhibits the growth of MDA-MB-231 breast and PC3 prostate cancer cells with GI50values of 0.01 and 1.02 μM, respectively. ATRA-BA (20 μM) has 15-fold greater antiproliferative activity in PC3 cells compared to an equimolar concentration of ATRA and BA.
Targets(IC50)	Others

Solubility Information

Solubility	DMSO: 5 mg/mL (10.49 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.098 mL	10.4899 mL	20.9798 mL
5 mM	0.4196 mL	2.098 mL	4.196 mL
10 mM	0.2098 mL	1.049 mL	2.098 mL
50 mM	0.042 mL	0.2098 mL	0.4196 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.

Reference

Gediya, L.K., Khandelwal, A., Patel, J., et al.Design, synthesis, and evaluation of novel mutual prodrugs (hybrid drugs) of all-trans-retinoic acid and histone deacetylase inhibitors with enhanced anticancer activities in breast and prostate cancer cells in vitroJ. Med. Chem.51(13)3895-3904(2008)

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