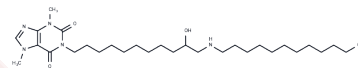


CT-2584

## Chemical Properties

CAS No. : 166981-13-1  
 Formula: C30H55N5O3  
 Molecular Weight: 533.79  
 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	CT-2584 is an anticancer agent that inhibits phospholipid signaling and kills tumor cells through the production of reactive oxygen intermediates. CT-2584 reduces NKEF-B expression in several tumor cell types. CT-2584 reduced tumor growth in SCID mice by causing shunting of ab initio phospholipid biosynthesis from phosphatidylcholine (PC) to phosphatidylinositol (PI) via PA.
Targets(IC50)	Reactive Oxygen Species, ROS
In vitro	CT-2584 (0-7 $\mu$ M, 3 days) was toxic to ECV304, to which B/1 cells were highly resistant. [5]; Toxicity was observed in human hepatocellular carcinoma Alex 0 cells at 3.5 mmol/L CT-2584 and Alex 0.5 cells at 2.0 mmol/L CT-2584. 24 hours later, cytotoxicity and decreased HBsAg (hepatitis B surface antigen) secretion were observed, even at lower concentrations. [6]
In vivo	Daily intraperitoneal injection of 25 mg/kg CT-2584 for three consecutive days was tolerated in SCID mice. When higher doses (50 mg/kg) were attempted, the animals died due to drug-related peritonitis. [6]

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8734 mL	9.367 mL	18.734 mL
5 mM	0.3747 mL	1.8734 mL	3.7468 mL
10 mM	0.1873 mL	0.9367 mL	1.8734 mL
50 mM	0.0375 mL	0.1873 mL	0.3747 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

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- Shau H, et al. Endogenous natural killer enhancing factor-B increases cellular resistance to oxidative stresses. *Free Radic Biol Med*. 1997;22(3):497-507.
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