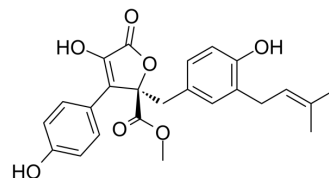


Butyrolactone I

Cat. No.:	HY-111237
CAS No.:	87414-49-1
Molecular Formula:	C ₂₄ H ₂₄ O ₇
Molecular Weight:	424.44
Target:	CDK
Pathway:	Cell Cycle/DNA Damage
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (235.60 mM; Need ultrasonic)						
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg	
				1 mM	2.3560 mL	11.7802 mL	23.5605 mL
				5 mM	0.4712 mL	2.3560 mL	4.7121 mL
				10 mM	0.2356 mL	1.1780 mL	2.3560 mL
Please refer to the solubility information to select the appropriate solvent.							
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (5.89 mM); Clear solution						
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (5.89 mM); Clear solution						
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.89 mM); Clear solution						

BIOLOGICAL ACTIVITY

Description	Butyrolactone I is an ATP-competitive inhibitor of CDK1 as a secondary metabolite from <i>A. terreus</i> ^[1] . Butyrolactone I has antitumor effects in non-small cell lung, small cell lung, and prostate cancer cell lines ^[2] .
IC ₅₀ & Target	CDK1

REFERENCES

[1]. Nishio K, et al. Antitumor effects of butyrolactone I, a selective cdc2 kinase inhibitor, on human lung cancer cell lines. *Anticancer Res.* 1996 Nov-Dec;16(6B):3387-95. P

Caution: Product has not been fully validated for medical applications. For research use only.

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