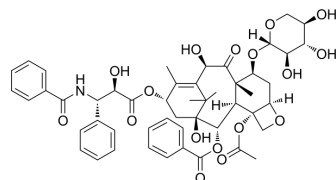


10-Deacetyl-7-xylosyl paclitaxel

Cat. No.:	HY-20584
CAS No.:	90332-63-1
Molecular Formula:	C ₅₀ H ₅₇ NO ₁₇
Molecular Weight:	943.98
Target:	Microtubule/Tubulin; ADC Cytotoxin
Pathway:	Cell Cycle/DNA Damage; Cytoskeleton; Antibody-drug Conjugate/ADC Related
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 33.33 mg/mL (35.31 mM; Need ultrasonic)
H₂O : < 0.1 mg/mL (insoluble)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.0593 mL	5.2967 mL	10.5934 mL
	5 mM	0.2119 mL	1.0593 mL	2.1187 mL
	10 mM	0.1059 mL	0.5297 mL	1.0593 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (2.65 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (2.65 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (2.65 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

10-Deacetyl-7-xylosyl paclitaxel is a Paclitaxel (a microtubule stabilizing agent; enhances tubulin polymerization) derivative with improved pharmacological features. IC₅₀ value: Target: Microtubule inhibitor 10-Deacetyl-7-xylosyl paclitaxel induced mitotic cell cycle arrest and apoptosis as measured by flow cytometry, DNA laddering, and transmission electron microscopy. Pro-apoptotic Bax and Bad protein expression was up-regulated and anti-apoptotic Bcl-2 and Bcl-XL expression down-regulated, which lead to a disturbance of the mitochondrial membrane permeability and to the activation of caspase-9. In turn, caspase-9 activated downstream caspases-3 and -6, but not caspase-8. Bid was also activated by caspase-3. Reversely, treatment with a caspase-10-specific inhibitor could not protect PC-3 cells from 7-xylosyl-10-deacetyl-paclitaxel-triggered apoptosis. Moreover, 7-xylosyl-10-deacetylpaclitaxel had no effect on the expression of CD95 and NF-kappaB

proteins, indicating that apoptosis was induced through the mitochondrial-dependent pathway in PC-3 cells.

IC₅₀ & Target

Traditional Cytotoxic Agents

REFERENCES

[1]. Jiang S, et al. Activation of the mitochondria-driven pathway of apoptosis in human PC-3 prostate cancer cells by a novel hydrophilic paclitaxel derivative, 7-xylosyl-10-deacetylpaclitaxel. *Int J Oncol.* 2008 Jul;33(1):103-11.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA