Proteins

Product Data Sheet

Tubulysin

Cat. No.: HY-128914

CAS No.: 1943604-24-7 Molecular Formula: $C_{44}H_{67}N_5O_9S$

Molecular Weight: 842.1

Target: ADC Cytotoxin; Microtubule/Tubulin; Antibiotic

Pathway: Antibody-drug Conjugate/ADC Related; Cell Cycle/DNA Damage; Cytoskeleton; Anti-

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (118.75 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.1875 mL	5.9375 mL	11.8751 mL
	5 mM	0.2375 mL	1.1875 mL	2.3750 mL
	10 mM	0.1188 mL	0.5938 mL	1.1875 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 (2.97 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (2.97 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (2.97 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

The Tubulysin family of secondary metabolites was originally isolated from the myxobacteria Archangium geophyra and Angiococcus disciformis. These compounds are potent microtubule destabilizers and anti-microtubule toxins (antimicrotubule toxins), with effective IC₅₀ concentrations against multidrug-resistant cancer cell lines. In the picomole range. Tubulysins are ideal candidates for incorporation into small active molecule conjugate (SMDC) delivery systems and are commonly used in ADC synthesis as ADC cytotoxins (ADC Cytotoxin)^[1].

REFERENCES

1]. Leamon CP, et al. Prostate-S 813.	Specific Membrane Antigen-Sp	ecific Antitumor Activity of a Self-	Immolative Tubulysin Conjugate. Bioconjug (Chem. 2019 Jun 19;30(6):1805-
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	Tel: 609-228-6898	Fax: 609-228-5909	E-mail: tech@MedChemExpress.com	
	Address: 1 De	eer Park Dr, Suite Q, Monmout	h Junction, NJ 08852, USA	

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