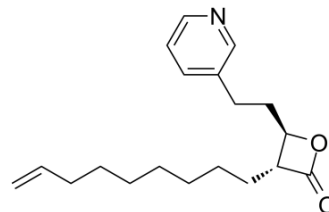


(3R,4R)-A2-32-01

Cat. No.:	HY-111532		
CAS No.:	1359752-95-6		
Molecular Formula:	C ₁₉ H ₂₇ NO ₂		
Molecular Weight:	301.42		
Target:	Bacterial		
Pathway:	Anti-infection		
Storage:	Pure form	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 200 mg/mL (663.53 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	3.3176 mL	16.5882 mL	33.1763 mL
	5 mM	0.6635 mL	3.3176 mL	6.6353 mL
	10 mM	0.3318 mL	1.6588 mL	3.3176 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: ≥ 5 mg/mL (16.59 mM); Clear solution
- Add each solvent one by one: **10% DMSO >> 90% (20% SBE-β-CD in saline)**
Solubility: ≥ 5 mg/mL (16.59 mM); Clear solution
- Add each solvent one by one: **10% DMSO >> 90% corn oil**
Solubility: ≥ 5 mg/mL (16.59 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

(3R,4R)-A2-32-01 (compound 2), an anti-virulence drug, is a specific **caseinolytic protein proteases (ClpP)** inhibitor with an EC₅₀ of 4.5 μM, and shows a tolerable cytotoxicity^[1].

In Vitro

(3R,4R)-A2-32-01 inhibits hemolysis with an ED₅₀ of 15 nmol on blood agar plates^[1].
(3R,4R)-A2-32-01 exhibits EC₅₀s of 50 μM and 75 μM in dropping metabolic activity of NIH3T3 fibroblasts and HaCat keratinocytes, respectively^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Zeiler E, et al. Development and characterization of improved β -lactone-based anti-virulence drugs targeting ClpP. Bioorg Med Chem. 2012 Jan 15;20(2):583-91.

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

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