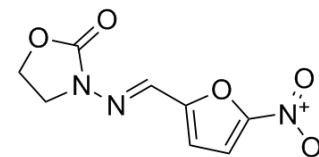


Furazolidone

Cat. No.:	HY-B1336		
CAS No.:	67-45-8		
Molecular Formula:	C ₈ H ₇ N ₃ O ₅		
Molecular Weight:	225.16		
Target:	Bacterial		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



Solvent & Solubility

In Vitro

DMSO : 10 mg/mL (44.41 mM; Need ultrasonic)
 H₂O : < 0.1 mg/mL (insoluble)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	4.4413 mL	22.2064 mL	44.4129 mL
	5 mM	0.8883 mL	4.4413 mL	8.8826 mL
	10 mM	0.4441 mL	2.2206 mL	4.4413 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 1 mg/mL (4.44 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: 1 mg/mL (4.44 mM); Suspended solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

Furazolidone is a nitrofurantoin derivative with antiprotozoal and antibacterial activity, inhibits AML1-ETO transformed cells with IC₅₀ value of 12.7 μM. Target: Antibacterial Furazolidone is a novel therapeutic strategy in AML patients. Furazolidone can Inhibit the bone-marrow transformation mediated by a series of leukemia fusion proteins. Furazolidone significantly inhibits proliferation of AML cell lines. Furazolidone induces apoptosis of the AML leukemic cells treatment with Furazolidone induces differentiation of AML cell lines.

REFERENCES

[1]. Jiang X, et al. A novel application of furazolidone: anti-leukemic activity in acute myeloid leukemia. PLoS One. 2013 Aug 9;8(8):e72335.

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

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