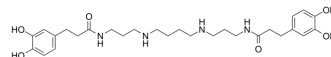


Kukoamine A

Cat. No.:	HY-N2392		
CAS No.:	75288-96-9		
Molecular Formula:	C ₂₈ H ₄₂ N ₄ O ₆		
Molecular Weight:	530.66		
Target:	Parasite		
Pathway:	Anti-infection		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

H₂O : 125 mg/mL (235.56 mM; Need ultrasonic)
 DMSO : 100 mg/mL (188.44 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.8844 mL	9.4222 mL	18.8445 mL
	5 mM	0.3769 mL	1.8844 mL	3.7689 mL
	10 mM	0.1884 mL	0.9422 mL	1.8844 mL

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

In Vivo

- Add each solvent one by one: PBS
Solubility: 100 mg/mL (188.44 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (4.71 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (4.71 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (4.71 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Kukoamine A is a natural occurring spermine derivative, acts as a potent inhibitor of trypanothione reductase (K_i, 1.8 μM), with antihypertensive activity^[1].

IC₅₀ & Target

K_i: 1.8 μM (Trypanothione reductase)^[1]

CUSTOMER VALIDATION

- Biomed Res Int. 21 Jun 2022.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Ponasik JA, et al. Kukoamine A and other hydrophobic acylpolyamines: potent and selective inhibitors of *Crithidia fasciculata* trypanothione reductase. *Biochem J.* 1995 Oct 15;311 (Pt 2):371-5.

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