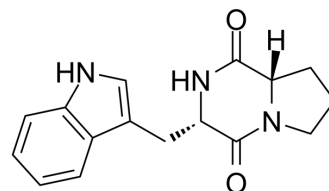


Brevianamide F

Cat. No.:	HY-100385		
CAS No.:	38136-70-8		
Molecular Formula:	C ₁₆ H ₁₇ N ₃ O ₂		
Molecular Weight:	283.33		
Target:	PI3K; Bacterial		
Pathway:	PI3K/Akt/mTOR; Anti-infection		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (176.47 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	3.5295 mL	17.6473 mL	35.2945 mL
		5 mM	0.7059 mL	3.5295 mL	7.0589 mL
10 mM		0.3529 mL	1.7647 mL	3.5295 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (8.82 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (8.82 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (8.82 mM); Clear solution 				

BIOLOGICAL ACTIVITY

Description	Brevianamide F (Cyclo(L-Pro-L-Trp)) is a mycotoxin isolated from Colletotrichum gloeosporioides, with antibacterial activity. Brevianamide F shows potent PI3Kα inhibitory activity with an IC ₅₀ of 4.8 μM ^{[1][2]} .
IC₅₀ & Target	PI3Kα 4.8 μM (IC ₅₀)
In Vitro	Brevianamide F shows moderate activity against both MSSA and MRSA ^[1] .

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

CUSTOMER VALIDATION

- mSphere. 2018 Mar 14;3(2). pii: e00050-18.
- Toxins. 2019 Sep 14;11(9):537.

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. Gos FMWR, et al. Antibacterial Activity of Endophytic Actinomycetes Isolated from the Medicinal Plant *Vochysia divergens* (Pantanal, Brazil). *Front Microbiol.* 2017 Sep 6;8:1642.
- [2]. Yang ZD, et al. Secondary Metabolites and PI3K Inhibitory Activity of *Colletotrichum gloeosporioides*, a Fungal Endophyte of *Uncaria rhynchophylla*. *Curr Microbiol.* 2019 Jul;76(7):904-908.
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Caution: Product has not been fully validated for medical applications. For research use only.

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