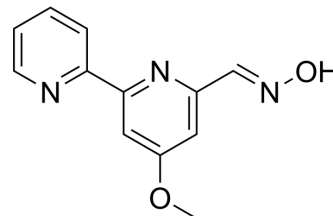


## Caerulomycin A

Cat. No.:	HY-114495		
CAS No.:	21802-37-9		
Molecular Formula:	C <sub>12</sub> H <sub>11</sub> N <sub>3</sub> O <sub>2</sub>		
Molecular Weight:	229.24		
Target:	Fungal; Antibiotic		
Pathway:	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 : 150 mg/mL (654.34 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	4.3622 mL	21.8112 mL	43.6224 mL
		5 mM	0.8724 mL	4.3622 mL	8.7245 mL
		10 mM	0.4362 mL	2.1811 mL	4.3622 mL
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline Solubility: ≥ 2.5 mg/mL (10.91 mM); Clear solution</li> <li>Add each solvent one by one: 10% DMSO &gt;&gt; 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (10.91 mM); Clear solution</li> </ol>				

### BIOLOGICAL ACTIVITY

Description	Caerulomycin A (Cerulomycin; Caerulomycin), an antifungal compound, induces generation of T cells, enhances TGF-β-Smad3 protein signaling via suppressing interferon-γ-induced STAT1 signaling. Antifungal and antibiotic activity, and used in autoimmune diseases <sup>[1]</sup> .
IC <sub>50</sub> & Target	Antifungal <sup>[1]</sup> TGF-β-Smad3 <sup>[1]</sup>

### REFERENCES

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[1]. Gurram RK, et al. Caerulomycin A enhances transforming growth factor- $\beta$  (TGF- $\beta$ )-Smad3 protein signaling by suppressing interferon- $\gamma$  (IFN- $\gamma$ )-signal transducer and activator of transcription 1 (STAT1) protein signaling to expand regulatory T cells (Tregs). J Biol Chem. 2014 Jun 20;289(25):17515-28.

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

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