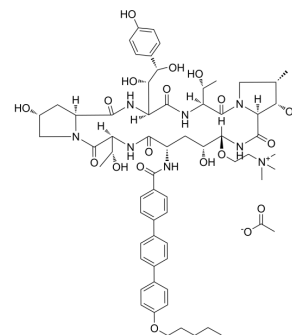


## Rezafungin acetate

<b>Cat. No.:</b>	HY-108009A
<b>CAS No.:</b>	1631754-41-0
<b>Molecular Formula:</b>	C <sub>65</sub> H <sub>88</sub> N <sub>8</sub> O <sub>19</sub>
<b>Molecular Weight:</b>	1285.44
<b>Target:</b>	Fungal
<b>Pathway:</b>	Anti-infection
<b>Storage:</b>	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



### SOLVENT & SOLUBILITY

<b>In Vitro</b>	DMSO : 230 mg/mL (178.93 mM; Need ultrasonic)					
	<b>Preparing Stock Solutions</b>	<b>Solvent</b>	<b>Mass</b>	<b>1 mg</b>	<b>5 mg</b>	<b>10 mg</b>
		<b>Concentration</b>				
		<b>1 mM</b>		0.7779 mL	3.8897 mL	7.7794 mL
		<b>5 mM</b>		0.1556 mL	0.7779 mL	1.5559 mL
<b>10 mM</b>		0.0778 mL	0.3890 mL	0.7779 mL		
Please refer to the solubility information to select the appropriate solvent.						
<b>In Vivo</b>	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 5.75 mg/mL (4.47 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 5.75 mg/mL (4.47 mM); Clear solution					
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 5.75 mg/mL (4.47 mM); Clear solution					

### BIOLOGICAL ACTIVITY

<b>Description</b>	Rezafungin acetate (Biafungin acetate) is a next-generation, broad-spectrum, and long-lasting echinocandin. Rezafungin acetate shows potent antifungal activity against <i>Candida</i> spp., <i>Aspergillus</i> spp., and <i>Pneumocystis</i> spp. <sup>[1][2]</sup>	
<b>In Vivo</b>	Rezafungin acetate (Biafungin acetate) (1 mg/kg; i.p. once daily for 6 days) shows potent in vivo efficacy as prophylaxis against <i>Pneumocystis</i> in a mouse infection model <sup>[1]</sup> .	
	MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
<b>Animal Model:</b>	C3H/HeN mice <sup>[1]</sup>	

Dosage:	1 mg/kg
Administration:	Intraperitoneal injection; once daily for 6 days
Result:	Significantly reduced nuclei and asci burdens.

## REFERENCES

- [1]. Melanie Cushion, et al. Rezafungin Prophylactic Efficacy in a Mouse Model of Pneumocystis Pneumonia. VOLUME 25, ISSUE 3, SUPPLEMENT, S366, MARCH 01, 2019.
- [2]. Sofjan AK, et al. Rezafungin (CD101), a next-generation echinocandin: A systematic literature review and assessment of possible place in therapy. J Glob Antimicrob Resist. 2018 Sep;14:58-64.

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

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