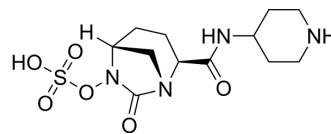


## Relebactam

Cat. No.:	HY-16752		
CAS No.:	1174018-99-5		
Molecular Formula:	C <sub>12</sub> H <sub>20</sub> N <sub>4</sub> O <sub>6</sub> S		
Molecular Weight:	348.38		
Target:	Bacterial; Beta-lactamase		
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 : 125 mg/mL (358.80 mM; Need ultrasonic)  
 H<sub>2</sub>O : 50 mg/mL (143.52 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.8704 mL	14.3521 mL	28.7043 mL
	5 mM	0.5741 mL	2.8704 mL	5.7409 mL
	10 mM	0.2870 mL	1.4352 mL	2.8704 mL

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

#### In Vivo

1. Add each solvent one by one: PBS  
 Solubility: 25 mg/mL (71.76 mM); Clear solution; Need ultrasonic

### BIOLOGICAL ACTIVITY

#### Description

Relebactam is a diazabicyclooctane inhibitor with activity against a wide spectrum of  $\beta$ -lactamases, including class A (extended-spectrum  $\beta$ -lactamases and KPC) and class C (AmpC) enzymes. Relebactam shows antibacterial activity<sup>[1]</sup>.

#### In Vitro

Relebactam combine with Imipenem demonstrates activity against KPC-producing Enterobacteriaceae and multidrug-resistant *P. aeruginosa*<sup>[1]</sup>.  
 Relebactam shows limited inhibition of Class D-producing bacteria and has antipseudomonal activity<sup>[2]</sup>.  
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### CUSTOMER VALIDATION

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- Int J Antimicrob Agents. 3 September 2022, 106669.
  - ACS Infect Dis. 2021 Mar 16.
  - J Antimicrob Chemother. 2021 May 6;dkab141.
  - J Antimicrob Chemother. 2021 Feb 11;76(3):653-658.
  - Antimicrob Agents Chemother. 2023 Nov 16:e0034623.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

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- [1]. Lapuebla A, et al. Activity of Imipenem with Relebactam against Gram-Negative Pathogens from New York City. Antimicrob Agents Chemother. 2015 Aug;59(8):5029-31.
- [2]. Bush K. A resurgence of  $\beta$ -lactamase inhibitor combinations effective against multidrug-resistant Gram-negative pathogens. Int J Antimicrob Agents. 2015 Nov;46(5):483-93.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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