



上海源叶生物科技有限公司
Shanghai yuanye Bio-Technology Co., Ltd
电话: 021-61312973 传真: 021-55068248
网址: www.shyuanye.com
邮箱: shyysw@sina.com

产品名称: **Relebactam**
产品别名: **MK-7655**

生物活性:				
Description	<p>Relebactam is a diazabicyclooctane inhibitor with activity against a wide spectrum of β-lactamases, including class A (extended-spectrum β-lactamases [ESBLs] and KPC) and class C (AmpC) enzymes. Target: beta-lactamase Imipenem with Relebactam is active against Escherichia coli, Klebsiella pneumoniae, and Enterobacter spp., including K. pneumoniae carbapenemase (KPC)-producing isolates. The combination of Imipenem with Relebactam demonstrated activity against KPC-producing Enterobacteriaceae and multidrug-resistant P. aeruginosa. The imipenem MIC₅₀ and MIC₉₀ values for the ESBL-producing isolates were 0.25 and 0.5 μg/ml, respectively; with the addition of Relebactam, the corresponding values were 0.25 and 0.25 μg/ml. Five isolates harbored blaKPC. For these 5 isolates, the imipenem MICs ranged from 0.5 to >32 μg/ml. With the addition of Relebactam, the MICs decreased to 0.12 to 0.5 μg/ml.[1] Relebactam inhibits most class A and class C β-lactamases, with selected inhibition of class D enzymes by avibactam. β-Lactamase inhibitors (BLIs) have played an important role in combatting β-lactam resistance in Gram-negative bacteria, but their effectiveness has diminished with the evolution of diverse and deleterious varieties of β-lactamases.[2]</p>			
Solvent&Solubility	In Vitro: H₂O : 72 mg/mL (206.67 mM; Need ultrasonic and warming)			
		<div>Solvent / Mass / Concentration</div>	1 mg	5 mg
	Preparing	1 mM	2.8704 mL	14.3521 mL
	Stock Solutions	5 mM	0.5741 mL	2.8704 mL
		10 mM	0.2870 mL	1.4352 mL
<p>*请根据产品在不同溶剂中的溶解度选择合适的溶剂配制储备液; 一旦配成溶液, 请分装保存, 避免反复冻融造成的产品失效。</p> <p>储备液的保存方式和期限: -80°C, 6 months; -20°C, 1 month。 -80°C 储存时, 请在 6 个月内使用, -20°C 储存时, 请在 1 个月内使用。</p>				
References	<p>[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.</p> <p>[2]. Bush K. A resurgence of β-lactamase inhibitor combinations effective against multidrug-resistant Gram-negative pathogens. Int J Antimicrob Agents. 2015 Nov;46(5):483-93.</p>			