



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](http://www.shyuanye.com)  
邮箱: [shyysw@sina.com](mailto:shyysw@sina.com)

产品名称: **Tebipenem**  
产品别名: 泰比培南; **LJC 11036**

生物活性:					
Description	Tebipenem is an orally available carbapenem antibiotic, shows broad-spectrum activity against Gram-positive and -negative bacteria, except for <i>Pseudomonas aeruginosa</i> .				
In Vitro	Tebipenem exhibits slow tight-binding inhibition at low micromolar concentrations versus the chromogenic substrate nitrocefin, and apparent $K_m$ and $k_{cat}$ values of 0.8 $\mu$ M and 0.03 min <sup>-1</sup> , respectively <sup>[1]</sup> . Tebipenem shows potent activity against <i>B. pseudomallei</i> , with MIC <sub>50</sub> and MIC <sub>90</sub> values of both 2 mg/L <sup>[2]</sup> . Tebipenem shows good activity against <i>S. pneumoniae</i> , with the MIC range of $\leq$ 0.25 $\mu$ g/mL in all of the <i>S. pneumoniae</i> isolates <sup>[3]</sup> .				
Solvent&Solubility	<b>In Vitro:</b> <b>DMSO : <math>\geq</math> 45 mg/mL (117.34 mM)</b> <b>H<sub>2</sub>O : 6.2 mg/mL (16.17 mM; Need ultrasonic and warming)</b>  * " $\geq$ " means soluble, but saturation unknown.				
	<div>Preparing  Stock Solutions</div>	<div>Solvent / Mass / Concentration</div>	1 mg	5 mg	10 mg
		1 mM	2.6076 mL	13.0381 mL	26.0763 mL
		5 mM	0.5215 mL	2.6076 mL	5.2153 mL
		10 mM	0.2608 mL	1.3038 mL	2.6076 mL
	*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。  储备液的保存方式和期限：-80℃, 6 months; -20℃, 1 month。 -80℃ 储存时，请在 6 个月内使用，-20℃ 储存时，请在 1 个月内使用。				
References	<div>[1]. Hazra S, et al. Tebipenem, a new carbapenem antibiotic, is a slow substrate that inhibits the <math>\beta</math>-lactamase from <i>Mycobacterium tuberculosis</i>. <i>Biochemistry</i>. 2014 Jun 10;53(22):3671-8.</div> <div>[2]. Seenama C, et al. In vitro activity of tebipenem against <i>Burkholderia pseudomallei</i>. <i>Int J Antimicrob Agents</i>. 2013 Oct;42(4):375.</div> <div>[3]. Li H, et al. In vitro antibacterial activities of two novel oral antibiotics, tebipenem and cefditoren, and other comparators against community-acquired respiratory tract infection-associated bacterial pathogens: A multicentre study in China. <i>Int J Antimicrob Agents</i>. 2014 Jan;43(1):92-3.</div>				