

## 产品名称: AFN-1252

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### 生物活性:

Description	AFN-1252(Debio 1452) is a potent inhibitor of enoyl-acyl carrier protein reductase (FabI), inhibited all clinical isolates of <i>Staphylococcus aureus</i> and <i>Staphylococcus epidermidis</i> at concentrations of $\leq 0.12 \mu\text{g/ml}$ . IC50 value: Target: Antibiotic agent AFN-1252 was inactive (MIC90, $>4 \mu\text{g/ml}$ ) against clinical isolates of <i>Streptococcus pneumoniae</i> , beta-hemolytic streptococci, <i>Enterococcus</i> spp., <i>Enterobacteriaceae</i> , nonfermentative gram-negative bacilli, and <i>Moraxella catarrhalis</i> . These data support the continued development of AFN-1252 for the treatment of patients with resistant staphylococcal infections.																												
Solvent&Solubility	<p><b>In Vitro:</b></p> <p>DMSO : 5.8 mg/mL (15.45 mM; Need ultrasonic)</p> <table border="1"><thead><tr><th></th><th>Solvent Concentration</th><th>Mass</th><th>1 mg</th><th>5 mg</th><th>10 mg</th></tr></thead><tbody><tr><td>Preparing</td><td>1 mM</td><td></td><td>2.6637 mL</td><td>13.3184 mL</td><td>26.6368 mL</td></tr><tr><td>Stock Solutions</td><td>5 mM</td><td></td><td>0.5327 mL</td><td>2.6637 mL</td><td>5.3274 mL</td></tr><tr><td></td><td>10 mM</td><td></td><td>0.2664 mL</td><td>1.3318 mL</td><td>2.6637 mL</td></tr></tbody></table> <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>						Solvent Concentration	Mass	1 mg	5 mg	10 mg	Preparing	1 mM		2.6637 mL	13.3184 mL	26.6368 mL	Stock Solutions	5 mM		0.5327 mL	2.6637 mL	5.3274 mL		10 mM		0.2664 mL	1.3318 mL	2.6637 mL
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References	<ul style="list-style-type: none"><li>[1]. Karlowsky JA, et al. AFN-1252, a FabI inhibitor, demonstrates a <i>Staphylococcus</i>-specific spectrum of activity. <i>Antimicrob Agents Chemother</i>. 2009 Aug;53(8):3544-8.</li><li>[2]. Narasimha Rao K, et al. AFN-1252 is a potent inhibitor of enoyl-ACP reductase from <i>Burkholderia pseudomallei</i>-Crystal structure, mode of action, and biological activity. <i>Protein Sci</i>. 2015 May;24(5):832-40.</li><li>[3]. Yao J, et al. Resistance to AFN-1252 arises from missense mutations in <i>Staphylococcus aureus</i> enoyl-acyl carrier protein reductase (FabI). <i>J Biol Chem</i>. 2013 Dec 20;288(51):36261-71.</li><li>[4]. Parsons JB, et al. Perturbation of <i>Staphylococcus aureus</i> gene expression by the enoyl-acyl carrier protein reductase inhibitor AFN-1252. <i>Antimicrob Agents Chemother</i>. 2013 May;57(5):2182-90.</li></ul>																												