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产品名称: **TBA-354**
 产品别名: **TBA-354**

生物活性:																																	
Description	<p>TBA-354 is a potent anti-tuberculosis compound; maintains activity against Mycobacterium tuberculosis H37Rv isogenic monoresistant strains and clinical drug-sensitive and drug-resistant isolates. IC50 value: Target: Anti-tuberculosis agent in vitro: TBA-354 is narrow spectrum and bactericidal in vitro against replicating and nonreplicating Mycobacterium tuberculosis, with potency similar to that of delamanid and greater than that of PA-824. TBA-354 maintains activity against Mycobacterium tuberculosis H37Rv isogenic monoresistant strains and clinical drug-sensitive and drug-resistant isolates [1]. TBA-354 is 5 to 10 times more potent than PA-824, but selected mutants are cross-resistant to PA-824 and delamanid. TBA-354 is 2 to 4 times more potent than PA-824 when combined with bedaquiline, and when administered at a dose equivalent to that of PA-824, TBA-354 demonstrated superior sterilizing efficacy [2]. in vivo: TBA-354 has high bioavailability and a long elimination half-life. In vitro studies suggest a low risk of drug-drug interactions. Low-dose aerosol infection models of acute and chronic murine tuberculosis reveal time- and dose-dependent in vivo bactericidal activity that is at least as potent as that of delamanid and more potent than that of PA-824.</p>																																
	<p>In Vitro: DMSO : ≥ 46 mg/mL (105.42 mM) * ">" means soluble, but saturation unknown.</p> <table border="1"> <thead> <tr> <th rowspan="2">Preparing</th> <th rowspan="2">Stock Solutions</th> <th>Solvent</th> <th>Mass</th> <th rowspan="2">1 mg</th> <th rowspan="2">5 mg</th> <th rowspan="2">10 mg</th> </tr> <tr> <th>Concentration</th> <th></th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td>1 mM</td> <td></td> <td>2.2918 mL</td> <td>11.4590 mL</td> <td>22.9179 mL</td> </tr> <tr> <td></td> <td></td> <td>5 mM</td> <td></td> <td>0.4584 mL</td> <td>2.2918 mL</td> <td>4.5836 mL</td> </tr> <tr> <td></td> <td></td> <td>10 mM</td> <td></td> <td>0.2292 mL</td> <td>1.1459 mL</td> <td>2.2918 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。 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>				Preparing	Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg	Concentration				1 mM		2.2918 mL	11.4590 mL	22.9179 mL			5 mM		0.4584 mL	2.2918 mL	4.5836 mL			10 mM		0.2292 mL	1.1459 mL
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References	<p>[1]. Upton AM, et al. In Vitro and In Vivo Activities of the Nitroimidazole TBA-354 against Mycobacterium tuberculosis. Antimicrob Agents Chemother. 2015 Jan;59(1):136-44. [2]. Tasneen R, et al. Contribution of the Nitroimidazoles PA-824 and TBA-354 to the Activity of Novel Regimens in Murine Models of Tuberculosis. Antimicrob Agents Chemother. 2015 Jan;59(1):129-35.</p>																																