

产品名称：琥珀酸普卡必利

产品别名：Prucalopride succinate; 琥珀酸普卡比利

| 生物活性: | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|--|-----------|------------|------------|------------------------------|---------------------------------|------|------|-------|------|-----------|------------|------------|------|-----------|-----------|-----------|-------|-----------|-----------|-----------|
| Description | <p>Prucalopride succinate is a selective, high affinity 5-HT₄ receptor agonist with pK_i of 8.6/8.1 for 5-HT_{4a/4b}. IC₅₀ value: Target: 5-HT₄ agonist in vitro: Prucalopride was a 5-HT(4) receptor agonist in the guinea-pig colon, as it induced contractions (pEC(50)=7.48+/-0.06; insensitive to a 5-HT(2A) or 5-HT(3) receptor antagonist, but inhibited by a 5-HT(4) receptor antagonist) as well as the facilitation of electrical stimulation-induced noncholinergic contractions (blocked by a 5-HT(4) receptor antagonist). Prucalopride did not cause relevant inhibition of 5-HT(2A), 5-HT(2B), or 5-HT(3), motilin or cholecystokinin (CCK(1)) receptor-mediated contractions, nor nicotinic or muscarinic acetylcholine receptor-mediated contractions, up to 10 microM [1]. in vivo: Rat microdialysis studies revealed that prucalopride maximally increased ACh and histamine levels in the prefrontal cortex at 5 and 10 mg/kg, whereas PRX-03140 significantly increased cortical histamine levels at 50 mg/kg, failing to affect ACh release at doses lower than 150 mg/kg [2].</p> | | | | | | | | | | | | | | | | | | | | |
| Solvent&Solubility | <p>In Vitro: DMSO : ≥ 36 mg/mL (74.08 mM) * "≥" means soluble, but saturation unknown.</p> <table border="1" data-bbox="448 902 1350 1115"> <thead> <tr> <th rowspan="2">Preparing Stock Solutions</th> <th>Solvent / Mass Concentration</th> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td>1 mM</td> <td>2.0578 mL</td> <td>10.2889 mL</td> <td>20.5778 mL</td> </tr> <tr> <td>5 mM</td> <td>0.4116 mL</td> <td>2.0578 mL</td> <td>4.1156 mL</td> </tr> <tr> <td>10 mM</td> <td>0.2058 mL</td> <td>1.0289 mL</td> <td>2.0578 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 Concentration | 1 mg | 5 mg | 10 mg | 1 mM | 2.0578 mL | 10.2889 mL | 20.5778 mL | 5 mM | 0.4116 mL | 2.0578 mL | 4.1156 mL | 10 mM | 0.2058 mL | 1.0289 mL | 2.0578 mL |
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| 10 mM | 0.2058 mL | 1.0289 mL | 2.0578 mL | | | | | | | | | | | | | | | | | | |
| References | <p>[1]. Briejer MR, et al. The in vitro pharmacological profile of prucalopride, a novel enterokinetic compound. <u>Eur J Pharmacol. 2001 Jun 29;423(1):71-83.</u></p> <p>[2]. Johnson DE, et al. The 5-hydroxytryptamine₄ receptor agonists prucalopride and PRX-03140 increase acetylcholine and histamine levels in the rat prefrontal cortex and the power of stimulated hippocampal θ oscillations. <u>J Pharmacol Exp Ther. 2012 Jun;341(3):681-91.</u></p> | | | | | | | | | | | | | | | | | | | | |