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产品名称: 亚叶酸钙

产品别名: **Folinic acid calcium salt pentahydrate**

生物活性:																		
Description	Folinic acid calcium salt pentahydrate (Leucovorin calcium salt pentahydrate) is a biological folic acid and is generally administered along with methotrexate (MTX) as a rescue agent to decrease MTX-induced toxicity[1].																	
In Vitro	MTX alone induces a concentration-related increase in % micronucleated binucleated cells (MNBN) and % aberrant cells (Abs). There is a decrease in nuclear division index (NDI) with increase in MTX concentration. Similarly, the mitotic index (MI) also decreases in all concentrations of MTX tested. The addition of Folinic acid at 50 µg/ mL significantly reduces % MNBN (40-68%) and % Abs (36-77%). Inhibition is also seen at 5 µg/ mL Folinic acid (12 to 54% for MNBN and 20 to 61% for Abs) [1].																	
In Vivo	Folinic acid (7.0 mg/kg; intraperitoneal injection; every second day; for 3 weeks; Balb/c young growing male mice) treatment following methotrexate (MTX) administration appears to reverse this growth inhibition (Chronic administration of MTX induces suppression of skeletal growth in mice)[2].																	
	Animal Model: 24 Balb/c young growing male mice aged 3 weeks (11.88 ± 0.25 g)[2]																	
	Dosage: 7.0 mg/kg																	
	Administration: Intraperitoneal injection; every second day; for 3 weeks																	
Result:	Following methotrexate (MTX) administration appears to reverse this growth inhibition.																	
Solvent&Solubility	In Vitro: H ₂ O : 18.04 mg/mL (29.89 mM; Need ultrasonic)																	
	<table border="1"> <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>1.6568 mL</td> <td>8.2838 mL</td> <td>16.5675 mL</td> </tr> <tr> <td>5 mM</td> <td>0.3314 mL</td> <td>1.6568 mL</td> <td>3.3135 mL</td> </tr> <tr> <td>10 mM</td> <td>0.1657 mL</td> <td>0.8284 mL</td> <td>1.6568 mL</td> </tr> </tbody> </table>	Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg	1 mM	1.6568 mL	8.2838 mL	16.5675 mL	5 mM	0.3314 mL	1.6568 mL	3.3135 mL	10 mM	0.1657 mL	0.8284 mL	1.6568 mL
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*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, 该产品在溶液状态不稳定, 建议您现用现配, 即刻使用。																		
References	<p>[1]. Keshava C, et al. Inhibition of methotrexate-induced chromosomal damage by folinic acid in V79 cells. Mutat Res. 1998 Feb 2;397(2):221-8.</p> <p>[2]. Iqbal MP, et al. Effect of methotrexate and folinic acid on skeletal growth in mice. Acta Paediatr. 2003 Dec;92(12):1438-44.</p>																	