



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
邮箱: shyysw@sina.com

产品名称: 1-epi-Calcitriol
产品别名: 表骨化三醇; Impurity B of Calcitriol;
1 β ,25-Dihydroxyvitamin-D3; 1-Epicalcitriol

生物活性:

Description

Impurity B of Calcitriol, Calcitriol(1,25-Dihydroxyvitamin D3; Rocaltrol) is the hormonally active form of vitamin D, Calcitriol is the active metabolite of vitamin D3 that activates the vitamin D receptor (VDR). IC50 value: Target: vitamin D receptor Calcitriol(1,25-Dihydroxyvitamin D3; Rocaltrol) displays calcemic actions. Calcitriol stimulates intestinal and renal Ca²⁺ absorption and regulates bone Ca²⁺ turnover. Calcitriol (1,25-Dihydroxyvitamin D3; Rocaltrol) exhibits antitumor activity; Calcitriol(1,25-Dihydroxyvitamin D3; Rocaltrol) inhibits in vivo and in vitro cell proliferation in a wide range of cells including breast, prostate, colon, skin and brain carcinomas and myeloid leukemia cells.

Solvent&Solubility

In Vitro:

DMSO : ≥ 100 mg/mL (240.02 mM)

* "≥" means soluble, but saturation unknown.

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		2.4002 mL	12.0008 mL	24.0015 mL
	5 mM		0.4800 mL	2.4002 mL	4.8003 mL
	10 mM		0.2400 mL	1.2001 mL	2.4002 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°C, 6 months; -20°C, 1 month (stored under nitrogen)。-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。

In Vivo:

请根据您的实验动物和给药方式选择适当的溶解方案。以下溶解方案都请先按照 In Vitro 方式配制澄清的储备液,再依次添加助溶剂:

——为保证实验结果的可靠性,澄清的储备液可以根据储存条件,适当保存;体内实验的工作液,建议您现用现配,当天使用;以下溶剂前显示的百分比是指该溶剂在您配制终溶液中的体积占比;如在配制过程中出现沉淀、析出现象,可以通过加热和/或超声的方式助溶

1.请依序添加每种溶剂: 10% DMSO→40% PEG300 →5% Tween-80 → 45% saline

Solubility: ≥ 2.5 mg/mL (6.00 mM); Clear solution

此方案可获得 ≥ 2.5 mg/mL (6.00 mM, 饱和度未知) 的澄清溶液。

以 1 mL 工作液为例,取 100 μ L 25.0 mg/mL 的澄清 DMSO 储备液加到 400 μ L PEG300 中,混合均匀向上述体系中加入 50 μ L Tween-80,混合均匀;然后继续加入 450 μ L 生理盐水定容至 1 mL。

2.请依序添加每种溶剂: 10% DMSO→ 90% (20% SBE- β -CD in saline)

Solubility: ≥ 2.5 mg/mL (6.00 mM); Clear solution

此方案可获得 ≥ 2.5 mg/mL (6.00 mM, 饱和度未知) 的澄清溶液。

以 1 mL 工作液为例,取 100 μ L 25.0 mg/mL 的澄清 DMSO 储备液加到 900 μ L 20% 的 SBE- β -CD 生理盐水水溶液中,混合均匀。



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	3.请依序添加每种溶剂: 10% DMSO →90% corn oil Solubility: ≥ 2.5 mg/mL (6.00 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (6.00 mM, 饱和度未知) 的澄清溶液, 此方案不适用于实验周期在半个月以上的实验。 以 1 mL 工作液为例, 取 100 μL 25.0 mg/mL 的澄清 DMSO 储备液加到 900 μL 玉米油中, 混合均匀。
References	[1]. Canalejo et al (2000) The in vitro effect of calcitriol on parathyroid cell proliferation and apoptosis. J.Am.Soc.Nephrol. 11 1865. Beer and Myrthue (2004) [2]. Calcitriol in cancer treatment: from the lab to the clinic. Mol.Cancer Ther. 3 373. [3]. Krishnan AV, Swami S, Feldman D.Equivalent anticancer activities of dietary vitamin D and calcitriol in an animal model of breast cancer: Importance of mammary CYP27B1 for treatment and prevention.J Steroid Biochem Mol Biol. 2012 Aug 23. [4]. Alkharfy KM, Al-Daghri NM, Yakout SM, Ahmed M. Calcitriol Attenuates Weight-Related Systemic Inflammation and Ultrastructural Changes of the Liver in a Rodent Model.Basic Clin Pharmacol Toxicol. 2012 Aug 21.

源叶生物