

产品名称：米托坦
产品别名：Mitotane

生物活性：

Description	Mitotane(2,4'-DDD), an isomer of DDD and derivative of DDT, is an antineoplastic medication used in the treatment of adrenocortical carcinoma. IC50 value: Target: Mitotane alters steroid peripheral metabolism, directly suppresses the adrenal cortex and alters cortisone metabolism leading to hypocortisolism. Side effects as reported by Schteinberg et al. include anorexia and nausea (88%), diarrhea (38%), vomiting (23%), decreased memory and ability to concentrate (50%), rash (23%), gynecomastia (50%), arthralgia (19%), and leukopenia (7%).																
Solvent&Solubility	In Vitro: DMSO : ≥ 100 mg/mL (312.46 mM) * "≥" means soluble, but saturation unknown.																
	Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg	1 mM	3.1246 mL	15.6230 mL	31.2461 mL	5 mM	0.6249 mL	3.1246 mL	6.2492 mL	10 mM	0.3125 mL	1.5623 mL	3.1246 mL
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			1 mM	3.1246 mL	15.6230 mL	31.2461 mL											
			5 mM	0.6249 mL	3.1246 mL	6.2492 mL											
	10 mM		0.3125 mL	1.5623 mL	3.1246 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℃, 6 months; -20℃, 1 month。 -80℃ 储存时，请在 6 个月内使用，-20℃ 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 (7.81 mM); Clear solution																	
此方案可获得 ≥ 2.5 mg/mL (7.81 mM, 饱和度未知) 的澄清溶液。																	
以 1 mL 工作液为例，取 100 μL 25.0 mg/mL 的澄清 DMSO 储备液加到 400 μL PEG300 中，混合均匀；向上述体系中加入 50 μL Tween-80，混合均匀；然后继续加入 450 μL 生理盐水定容至 1 mL。																	
2.请依序添加每种溶剂： 10% DMSO →90% corn oil																	
Solubility: ≥ 2.5 mg/mL (7.81 mM); Clear solution																	
此方案可获得 ≥ 2.5 mg/mL (7.81 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。																	
	[1]. Gentilin E, Tagliati F, Terzolo M. Mitotane reduces human and mouse ACTH-secreting pituitary cell viability and function. J Endocrinol. 2013 Jul 29;218(3):275-285. [2]. Lehmann TP, Wrzesiński T, Jagodziński PP. The effect of mitotane on viability, steroidogenesis and gene expression in NCI H295R adrenocortical cells. Mol Med Rep. 2013 Mar;7(3):893-900.																

References

- [3]. [Takeshita A, Igarashi-Migitaka J, Koibuchi N, Mitotane induces CYP3A4 expression via activation of the steroid and xenobiotic receptor. J Endocrinol. 2013 Feb 15;216\(3\):297-305.](#)
- [4]. [Ederhy S, Cohen A, Dufaitre G, No evidence for relevant QT interval prolongation in mitotane-treated patients with adrenocortical carcinoma. J Endocrinol Invest. 2012 Nov;35\(10\):911-4.](#)
- [5]. [Alexandraki KI, Kaltsas GA, le Roux CW, Assessment of serum-free cortisol levels in patients with adrenocortical carcinoma treated with mitotane: a pilot study. Clin Endocrinol \(Oxf\). 2010 Mar;72\(3\):305-11.](#)



源叶生物