产品名称：三氟拉嗪二盐酸盐
产品别名：盐酸三氟拉嗪；Trifluoperazine dihydrochloride

生物活性：

Description	Trifluoperazine dihydrochloride (TFP) is an antipsychotic phenothiazine agent and a selective α1-adrenergic receptor antagonist. Trifluoperazine dihydrochloride is also a potent dopamine D2 receptor inhibitor[1][2].
In Vitro	Trifluoperazine Dihydrochloride is a potent dopamine D2 receptor inhibitor used as an antipsychotic and an antiemetic. Target: Dopamine D2 Receptor Trifluoperazine Dihydrochloride is a potent dopamine D2 receptor inhibitor used as an antipsychotic and an antiemetic. Trifluoperazine inhibited in a dose-dependent manner the stimulation of glycogenolysis, gluconeogenesis, and ureogenesis due to alpha 1-adrenergic stimulation in rat hepatocytes. Trifluoperazine is much more potent at alpha 1- than at alpha 2-adrenergic receptors [1]. Trifluoperazine was not clearly different in terms of 'no substantial improvement' (n=1016, 27 RCTs, RR 1.06 CI 0.98 to 1.14) or leaving the study early (n=930, 22 RCTs, RR 1.15 CI 0.83 to 1.58). Almost identical numbers of people reported at least one adverse event (60%) in each group (n=585, 14 RCTs, RR 0.99 CI 0.87 to 1.13), although trifluoperazine was more likely to cause extrapyramidal adverse effects overall when compared to low potency antipsychotics such as chlorpromazine (n=130, 3 RCTs, RR 1.66 CI 1.03 to 2.67, NNH 6 CI 3 to 121). One small study (n=38) found no clear differences between trifluoperazine and the atypical drug, sulpiride [2].
Solvent&Solubility	***In Vitro:*** **H_2O : 50 mg/mL** (**104.08 mM**; Need ultrasonic) **DMSO : 50 mg/mL** (**104.08 mM;** Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.0815 mL	10.4076 mL	20.8151 mL
	5 mM	0.4163 mL	2.0815 mL	4.1630 mL
	10 mM	0.2082 mL	1.0408 mL	2.0815 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。-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 (5.20 mM); Clear solution

此方案可获得 ≥ 2.5 mg/mL (5.20 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% (20% SBE-β-CD in saline)

	Solubility: ≥ 2.5 mg/mL (5.20 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (5.20 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 900 μL 20% 的 SBE-β-CD 生理盐水水溶液中，混合均匀。 3.请依序添加每种溶剂： 10% DMSO →90% corn oil Solubility: ≥ 2.5 mg/mL (5.20 mM); Clear solution 此方案可获得 ≥ 2.5 mg/mL (5.20 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]. Huerta-Bahena, J., R. Villalobos-Molina, and J.A. Garcia-Sainz, Trifluoperazine and chlorpromazine antagonize alpha 1- but not alpha2- adrenergic effects. Mol Pharmacol, 1983. 23(1): p. 67-70. [2]. Marques, L.O., M.S. Lima, and B.G. Soares, Trifluoperazine for schizophrenia. Cochrane Database Syst Rev, 2004(1): p. CD003545.