产品名称：酒石酸艾芬地尔
产品别名：**Ifenprodil tartrate**

生物活性：

Description	Ifenprodil tartrate is the atypical N-methyl-D-aspartate (NMDA) receptor antagonist, inhibits NMDA-induced currents at NR1A/NR2B receptors with high affinity (IC50 = 0.34 μM)[1]. Ifenprodil tartrate inhibits G protein-activated inwardly rectifying K+ channels (GIRK, also known as Kir3), reduces inward currents through the basal GIRK activity[2]. Ifenprodil, which is a clinically used cerebral vasodilator, interacts with several receptors, such as alpha1 adrenergic, N-methyl-D-aspartate, serotonin and sigma receptors[2].
IC_{50} & Target	IC50: 0.34 μM (NR1A/NR2B receptor)[1]
Solvent&Solubility	***In Vitro:*** **DMSO : ≥ 500 mg/mL (1248.47 mM)** **H_2O : 5 mg/mL (12.48 mM;** Need ultrasonic) * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.4969 mL	12.4847 mL	24.9694 mL
	5 mM	0.4994 mL	2.4969 mL	4.9939 mL
	10 mM	0.2497 mL	1.2485 mL	2.4969 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： 1% DMSO→99% saline

Solubility: ≥ 1 mg/mL (2.50 mM); Clear solution

References

[1]. Williams K, et al. Ifenprodil discriminates subtypes of the N-methyl-D-aspartate receptor: selectivity and mechanisms at recombinant heteromeric receptors. Mol Pharmacol. 1993 Oct;44(4):851-9.

[2]. Kobayashi T, et al. Inhibition of G protein-activated inwardly rectifying K+ channels by ifenprodil. Neuropsychopharmacology. 2006 Mar;31(3):516-24.