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：JDTic (dihydrochloride)
产品别名：JDTic dihydrochloride

生物活性：

Description	JDTic (dihydrochloride) is a potent antagonist of kappa-opioid receptors (KOR), blocking the κ-agonist U50, 488-induced antinociception.
In Vivo	JDTic (2.5-16 mg/kg, s.c.) dose-dependently blocks the antinociceptive response of nicotine in the tail-flick test but has no effect in the hot-plate assay or body temperature assessments at any dose tested in the mice injected with nicotine[1]. JDTic (3 mg/kg, i.p.) is capable of reversing anxiety-like behavior in the rat model of hangover anxiety. JDTic (10 mg/kg, i.p.) decreases alcohol self-administration, suppresses cue-induced reinstatement of alcohol seeking, and specifically blocks the effects of a KOR agonist at the 2 h pretreatment time point[2]. JDTic (30 mg/kg, i.g.) significantly blockes U50,488-induced diuresis immediately in rats[3].
Solvent&Solubility	***In Vitro:*** **DMSO : 100 mg/mL** (**185.68 mM;** Need ultrasonic) **H_2O : 50 mg/mL** (**92.84 mM;** Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.8568 mL	9.2842 mL	18.5684 mL
	5 mM	0.3714 mL	1.8568 mL	3.7137 mL
	10 mM	0.1857 mL	0.9284 mL	1.8568 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。

References	[1]. Jackson KJ, et al. Effect of the selective kappa-opioid receptor antagonist JDTic on nicotine antinociception, reward, and withdrawal in the mouse. Psychopharmacology (Berl). 2010 Jun;210(2):285-94. [2]. Schank JR, et al. The kappa opioid receptor antagonist JDTic attenuates alcohol seeking and withdrawal anxiety. Addict Biol. 2012 May;17(3):634-47. doi: 10.1111/j.1369-1600.2012.00455.x. [3]. Beardsley PM, et al. Effectiveness of analogs of the kappa opioid receptor antagonist (3R)-7-hydroxy-N-((1S)-1-{[(3R,4R)-4-(3-hydroxyphenyl)-3,4-dimethyl-1-piperidinyl]methyl}-2-methylpropyl)-1,2,3,4-tetrahydro-3-isoquinolinecarboxamide (JDTic) to reduce

实验参考：

Animal Administration	Mice: Naive mice are injected s.c. with JDTic (1, 4, 8, or 16 mg/kg) 18 h prior to nicotine (2.5 mg/kg, s.c.). Due to JDTic's very long duration of action, an 18-h preinjection is chosen for the studies. Antinociception using the tail-flick and hot-plate tests is measured 5 min after nicotine injection or 20 min after morphine (8 mg/kg, s.c.), and changes in body temperature are measured 30 min after injection. To confirm an absence of mu antagonist effects by JDTic in these studies, JDTic (16 mg/kg) is also administered 1, 6, 18, and 24 h before morphine (8 mg/kg, s.c.) in the tail-flick test,

	and antinociception is measured 20 min after morphine. [1]
References	[1]. Jackson KJ, et al. Effect of the selective kappa-opioid receptor antagonist JDTic on nicotine antinociception, reward, and withdrawal in the mouse. Psychopharmacology (Berl). 2010 Jun;210(2):285-94. [2]. Schank JR, et al. The kappa opioid receptor antagonist JDTic attenuates alcohol seeking and withdrawal anxiety. Addict Biol. 2012 May;17(3):634-47. doi: 10.1111/j.1369-1600.2012.00455.x. [3]. Beardsley PM, et al. Effectiveness of analogs of the kappa opioid receptor antagonist (3R)-7-hydroxy-N-((1S)-1-{[(3R,4R)-4-(3-hydroxyphenyl)-3,4-dimethyl-1-piperidinyl]methyl}-2-methylpropyl)-1,2,3,4-tetrahydro-3-isoquinolinecarboxamide (JDTic) to reduce