CP-601932

Cat. No.: HY-138879B

CAS No.: 357425-68-4

Molecular Formula: $C_{12}H_{12}F_3N$

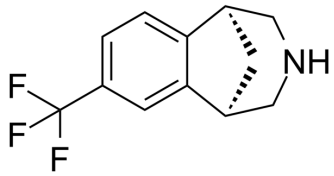
Molecular Weight: 227.23

Target: nAChR

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling

Storage:

Pure form	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 200 mg/mL (880.17 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.4008 mL	22.0041 mL	44.0083 mL
	5 mM	0.8802 mL	4.4008 mL	8.8017 mL
	10 mM	0.4401 mL	2.2004 mL	4.4008 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 5 mg/mL (22.00 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 5 mg/mL (22.00 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

CP-601932 ((1S,5R)-CP-601927) is a high-affinity partial agonist at α3β4 nAChR (K_i=21 nM; EC_{50}=~ 3 μM). CP-601932 has the same high-binding affinity at α4β2 nAChR (K_i=21 nM) and an order of magnitude lower affinity for α6 and α7 nAChR subtypes. CP-601932 selectively decreases ethanol but not sucrose consumption and operant self-administration following long-term exposure. CP-601932 can penetrate the CNS[1].

In Vivo

CP-601932 (10 mg/kg; s.c; adult male Sprague-Dawley rats) decreases active lever presses for 10% ethanol, but not 5% sucrose in the operant self-administration paradigm[1].

CP-601932 (adult male Sprague-Dawley rats) readily penetrates the CNS and at 30 min reaches maximal $C_{b,u}$ values of 340 nM after 5 mg/kg and 710 nM after 10 mg/kg. Brain concentrations of CP-601932 decline very slowly and levels stay relatively high, eg, 530 nM at 5 h and 85 nM at 24 h after 10 mg/kg[1].

	MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Chatterjee S, et al. Partial agonists of the α3β4* neuronal nicotinic acetylcholine receptor reduce ethanol consumption and seeking in rats. Neuropsychopharmacology. 2011;36(3):603-615.

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