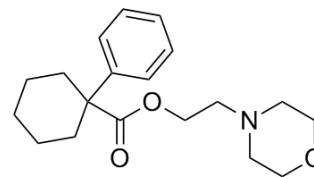


PRE-084 hydrochloride

Cat. No.:	HY-18100A		
CAS No.:	75136-54-8		
Molecular Formula:	C ₁₉ H ₂₈ ClNO ₃		
Molecular Weight:	353.88		
Target:	Sigma Receptor		
Pathway:	GPCR/G Protein; Neuronal Signaling		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



H-Cl

SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 34 mg/mL (96.08 mM)
 H₂O : 33.33 mg/mL (94.18 mM; ultrasonic and warming and heat to 60°C)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent		Mass		
	Concentration		1 mg	5 mg	10 mg
	1 mM		2.8258 mL	14.1291 mL	28.2582 mL
	5 mM		0.5652 mL	2.8258 mL	5.6516 mL
	10 mM		0.2826 mL	1.4129 mL	2.8258 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
 Solubility: ≥ 2.08 mg/mL (5.88 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: ≥ 2.08 mg/mL (5.88 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.08 mg/mL (5.88 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

PRE-084 hydrochloride is a high affinity, selective σ₁ agonist, has an IC₅₀ of 44 nM in the sigma receptor assay. IC₅₀ value: 44 nM
 Target: sigma receptor
 in vitro: PRE-084 has an IC₅₀ of more than 100,000 nM for PCP receptors and an IC₅₀ higher than 10,000 nM in a variety of other receptor systems. [1]
 in vivo: PRE-084 improves motor neuron survival and motor performance in wobbler mice. PRE-084 enhances BDNF-mediated trophic support. [2]

CUSTOMER VALIDATION

- Acta Pharmacol Sin. 2020 Apr;41(4):499-507.
- Acta Pharmacol Sin. 2020 Apr;41(4):499-507.
- Aging. 2020 May 14;12(10):9041-9065.

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REFERENCES

- [1]. Su TP, et al. Sigma compounds derived from phencyclidine: identification of PRE-084, a new, selective sigma ligand. J Pharmacol Exp Ther. 1991 Nov;259(2):543-550.
- [2]. Peviani M, et al. Neuroprotective effects of the Sigma-1 receptor (S1R) agonist PRE-084, in a mouse model of motor neuron disease not linked to SOD1 mutation. Neurobiol Dis. 2014 Feb;62:218-232.
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Caution: Product has not been fully validated for medical applications. For research use only.

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