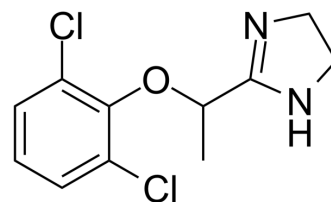


## Lofexidine hydrochloride

<b>Cat. No.:</b>	HY-B1052
<b>CAS No.:</b>	21498-08-8
<b>Molecular Formula:</b>	C <sub>11</sub> H <sub>13</sub> Cl <sub>2</sub> N <sub>2</sub> O
<b>Molecular Weight:</b>	295.59
<b>Target:</b>	Adrenergic Receptor
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling
<b>Storage:</b>	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



H-Cl

### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : ≥ 100 mg/mL (338.31 mM)  
 DMSO : 100 mg/mL (338.31 mM; Need ultrasonic)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
	1 mM		3.3831 mL	16.9153 mL	33.8306 mL
	5 mM		0.6766 mL	3.3831 mL	6.7661 mL
	10 mM		0.3383 mL	1.6915 mL	3.3831 mL

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

#### In Vivo

- Add each solvent one by one: PBS  
Solubility: 100 mg/mL (338.31 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.08 mg/mL (7.04 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.08 mg/mL (7.04 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.08 mg/mL (7.04 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Lofexidine (hydrochloride) is a selective α<sub>2</sub>-receptor agonist, commonly used to alleviate the physical symptoms of heroin and other types of opioid withdrawal<sup>[1][2]</sup>.

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## REFERENCES

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- [1]. Vartak AP, et al. The preclinical discovery of lofexidine for the treatment of opiate addiction. *Expert Opin Drug Discov.* 2014 Nov;9(11):1371-7.
- [2]. Gish EC, et al. Lofexidine, an  $\alpha_2$ -receptor agonist for opioid detoxification. *Ann Pharmacother.* 2010 Feb;44(2):343-51.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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