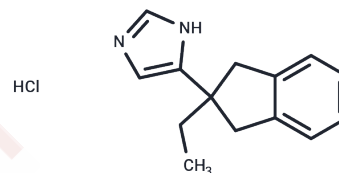


Atipamezole hydrochloride

Chemical Properties

CAS No. :	104075-48-1
Formula:	C ₁₄ H ₁₆ N ₂ ·HCl
Molecular Weight:	248.75
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Atipamezole is a synthetic α_2 adrenergic receptor antagonist. It has also been researched in humans as a potential anti-Parkinsonian drug. Atipamezole hydrochloride (MPV-1248 hydrochloride) is hydrochloride form of atipamezole.
Targets(IC50)	Adrenergic Receptor
In vitro	The affinity of atipamezole for α_2 -adrenoceptors and its α_2/α_1 selectivity ratio are considerably higher than yohimbine. Atipamezole is not selective for subtypes of α_2 -adrenoceptors. It has negligible affinity for 5-HT ₁ , 5-HT ₂ and I ₂ bindings sites[1].
In vivo	Atipamezole has been found to be well tolerated in rodents and displays only modest cardiovascular effects at dosages ranging from 0.01-1 mg/kg, administered intravenously, in anesthetized, normotensive rats. This compound is frequently utilized by veterinarians to reverse sedation or anesthesia in animals. Additionally, it has been observed to enhance sexual activity in both rats and monkeys. In situations of sustained nociception, atipamezole augments pain-related responses by inhibiting the noradrenergic feedback mechanism that normally suppresses pain. Furthermore, at low doses, atipamezole positively affects several cognitive functions in experimental animals, including alertness, selective attention, planning, learning, and recall, though its impact on short-term working memory remains unclear.

Solubility Information

Solubility	DMSO: 16.67 mg/mL (67 mM), Sonication is recommended. H ₂ O: 24.9 mg/mL (100.1 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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A DRUG SCREENING EXPERT

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.0201 mL	20.1005 mL	40.201 mL
5 mM	0.804 mL	4.0201 mL	8.0402 mL
10 mM	0.402 mL	2.0101 mL	4.0201 mL
50 mM	0.0804 mL	0.402 mL	0.804 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Pertovaara A, et al. Pharmacological properties, central nervous system effects, and potential therapeutic applications of atipamezole, a selective α_2 -adrenoceptor antagonist. CNS Drug Rev. 2005 Autumn;11(3):273-88.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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