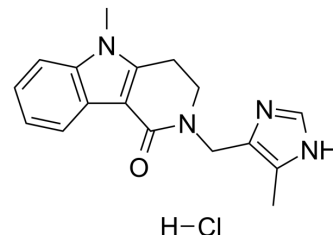


## Alosetron Hydrochloride

<b>Cat. No.:</b>	HY-70050C
<b>CAS No.:</b>	122852-69-1
<b>Molecular Formula:</b>	C <sub>17</sub> H <sub>19</sub> ClN <sub>4</sub> O
<b>Molecular Weight:</b>	330.81
<b>Target:</b>	5-HT 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)



### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : 33.33 mg/mL (100.75 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent		1 mg	5 mg	10 mg
	Concentration	Mass			
	1 mM		3.0229 mL	15.1144 mL	30.2288 mL
	5 mM		0.6046 mL	3.0229 mL	6.0458 mL
	10 mM		0.3023 mL	1.5114 mL	3.0229 mL

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

### BIOLOGICAL ACTIVITY

#### Description

Alosetron Hydrochloride (GR 68755C) is a potent and highly selective serotonin 5-HT<sub>3</sub> receptor antagonist. Alosetron Hydrochloride is used for the research of irritable bowel syndrome (IBS). Alosetron blocks the fast 5HT<sub>3</sub>-mediated depolarisation of guinea-pig myenteric and submucosal neurons, with IC<sub>50</sub> at ~55 nM. Alosetron Hydrochloride attenuates the visceral nociceptive effect of rectal distension in conscious or anaesthetised dogs. Anti-inflammatory effects<sup>[1][2]</sup>.

#### IC<sub>50</sub> & Target

5-HT<sub>3</sub> Receptor

#### In Vivo

Dexamethasone and Alosetron-treated (1 mg/kg; ip; daily for 6 days) rats exhibits a significant decrease in the diarrhea index, in comparison with TNBS-control group, especially after the initial 2 days of treatment following the induction of colitis<sup>[2]</sup>.

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

### REFERENCES

[1]. Targeting the 5-HT<sub>3</sub> receptor in the treatment of irritable bowel syndrome By Spiller, Robin C. From Current Opinion in Pharmacology (2011), 11(1), 68-74.

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- [3]. Lewis JH. Alosetron for severe diarrhea-predominant irritable bowel syndrome: safety and efficacy in perspective. *Expert Rev Gastroenterol Hepatol*. 2010 Feb;4(1):13-29.
- [4]. Turgeon DK, Tayeh N, Fontana RJ. Acute hepatitis associated with alosetron (Lotronex). *J Clin Gastroenterol*. 2005 Aug;39(7):641-2.
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- [6]. Balfour JA, Goa KL, Perry CM. Alosetron. *Drugs*. 2000;59(3):511-520.
- [7]. Motavallian A, et al. Anti-inflammatory effects of alosetron mediated through 5-HT<sub>3</sub> receptors on experimental colitis. *Res Pharm Sci*. 2019;14(3):228-236.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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