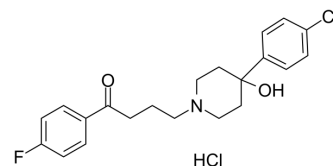


## Haloperidol hydrochloride

<b>Cat. No.:</b>	HY-14538A
<b>CAS No.:</b>	1511-16-6
<b>Molecular Formula:</b>	C <sub>21</sub> H <sub>24</sub> Cl <sub>2</sub> FNO <sub>2</sub>
<b>Molecular Weight:</b>	412.33
<b>Target:</b>	Dopamine Receptor
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Haloperidol hydrochloride is a potent dopamine D2 receptor antagonist, widely used as an antipsychotic.
<b>In Vivo</b>	Haloperidol (1 mg) intra-arterially attenuates the dopamine-induced pancreatic secretion. Haloperidol (3 mg) completely inhibits the action of 10 µg of dopamine in the pancreas of the dogs <sup>[1]</sup> . Haloperidol (10 mg/kg) as well as chlorpromazine (CPZ, 15 mg/kg) blocks mescaline-induced altered behavior within 7 to 10 minutes when injected into the mice 45 minutes after 50 mg/kg (2 µc) of mescaline. Haloperidol has no effect on mescaline disappearance <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### PROTOCOL

<b>Animal Administration</b> <sup>[2]</sup>	Male albino mice of Swiss-Webster strain (33-36 g) are used, and all substances are given by i.p. injection in a volume of 0.5 mL. CPZ, haloperidol and mescaline are all in time form of their hydrochlorides and the dose solutions are prepared at concentrations of 1.0, 0.66 and 3.3 mg/mL of 0.9% saline, respectively. The doses are: CPZ, 15 mg/kg; haloperidol, 10 mg/kg; mescaline, 50 mg/kg. Mice are pretreated with either CPZ or haloperidol 30 minutes before administration of mescaline. In some instances CPZ is injected 45 minutes after mescaline. Time animals are housed individually in a plexiglas cage and the gross behavior and locomotor activity. At selected intervals after mescaline, groups of mice are sacrificed by decapitation. Plasma is separated and stored at -20°C. The brain, liver, kidney, lung, spleen and heart are frozen on dry ice and stored at -20°C for 18 to 20 hours before they are used for assays. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
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### CUSTOMER VALIDATION

- Br J Pharmacol. 2021 Apr 26.
- EMBO Rep. 2022 Jan 17;e53191.
- PLoS Negl Trop Dis. 2019 Aug 20;13(8):e0007681.
- J Ethnopharmacol. 2021 Mar 9;113994.
- Behav Brain Res. 2022 Jan 17;113759.

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## REFERENCES

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- [1]. Joy CB, et al. Haloperidol versus placebo for schizophrenia. Cochrane Database Syst Rev. 2006 Oct 18;(4):CD003082.
- [2]. Giannini AJ, et al. Acute ketamine intoxication treated by haloperidol: a preliminary study. Am J Ther. 2000 Nov;7(6):389-91.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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