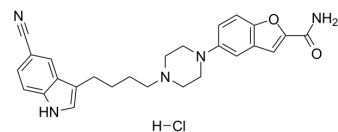


## Vilazodone Hydrochloride

<b>Cat. No.:</b>	HY-14261
<b>CAS No.:</b>	163521-08-2
<b>Molecular Formula:</b>	C <sub>26</sub> H <sub>28</sub> ClN <sub>5</sub> O <sub>2</sub>
<b>Molecular Weight:</b>	478
<b>Target:</b>	5-HT Receptor; Serotonin Transporter
<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

<b>In Vitro</b>	DMSO : 25 mg/mL (52.30 mM; Need ultrasonic)					
	H <sub>2</sub> O : < 0.1 mg/mL (ultrasonic;warming;heat to 60°C) (insoluble)					
	<b>Preparing Stock Solutions</b>	<b>Solvent</b>	<b>Mass</b>	<b>1 mg</b>	<b>5 mg</b>	<b>10 mg</b>
		<b>Concentration</b>				
		<b>1 mM</b>		2.0921 mL	10.4603 mL	20.9205 mL
<b>5 mM</b>			0.4184 mL	2.0921 mL	4.1841 mL	
	<b>10 mM</b>		0.2092 mL	1.0460 mL	2.0921 mL	
Please refer to the solubility information to select the appropriate solvent.						
<b>In Vivo</b>	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (5.23 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (5.23 mM); Clear solution					
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (5.23 mM); Clear solution					

### BIOLOGICAL ACTIVITY

<b>Description</b>	Vilazodone Hydrochloride (EMD 68843 Hydrochloride) is a serotonin transporter (SER) inhibitor and 5-HT <sub>1A</sub> receptor partial agonist.	
<b>IC<sub>50</sub> &amp; Target</b>	sPLA2	5-HT <sub>1A</sub> Receptor
<b>In Vivo</b>	Administration of 5-HT <sub>1A</sub> receptor agonists produce a characteristic behavioral syndrome that includes changes in posture, hind limb reduction, head weaving, tremors, forepaw treading, and straub tail. In the rat ultrasonic vocalizations test, stress-induced vocalizations are inhibited by Vilazodone Hydrochloride (EMD 68843 Hydrochloride) (55 mg/kg po) at 120 and 210	

min post dose. Vilazodone Hydrochloride (EMD 68843 Hydrochloride) (20-40 mg/kg ip), administered acutely or prophylactically (1 week prior to behavioral testing), attenuated stress induces potentiated startle but has no effect on stress potentiated anxiety response in the elevated plus maze. Interestingly, a lower dose of 10 mg/kg of Vilazodone Hydrochloride (EMD 68843 Hydrochloride) has the opposite effect in the startle response, indicating a somewhat unexplained bidirectional effect, and all doses produce a potentiation of the startle-induced stress response possibly suggestive of an anxiogenic-like response<sup>[1]</sup>. Vilazodone Hydrochloride (EMD 68843 Hydrochloride) also represents another option for the treatment of MDD<sup>[2]</sup>.

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

## CUSTOMER VALIDATION

- Nature. 2023 Dec;624(7992):672-681.
- Prog Neuropsychopharmacol Biol Psychiatry. 2023 Dec 6:110911.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. Lee A, Dawson et al. Vilazodone: A 5-HT<sub>1A</sub> Receptor Agonist/Serotonin Transporter Inhibitor for the Treatment of Affective Disorders CNS Neuroscience & Therapeutics Volume 15, Issue 2, pages 107-117, June 2009

[2]. Reed CR, Kajdasz DK, Whalen H, Athanasiou MC, Gallipoli S, Thase ME. The efficacy profile of vilazodone, a novel antidepressant for the treatment of major depressive disorder. Curr Med Res Opin. 2012 Jan;28(1):27-39.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA