# **Screening Libraries**

# Clidinium bromide

Cat. No.: HY-B1132 CAS No.: 3485-62-9 Molecular Formula: C<sub>22</sub>H<sub>26</sub>BrNO<sub>3</sub> Molecular Weight: 432.35 Target: mAChR

Pathway: GPCR/G Protein; Neuronal Signaling

\* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

**Product** Data Sheet

## **SOLVENT & SOLUBILITY**

In Vitro

Storage:

DMSO: 125 mg/mL (289.12 mM; Need ultrasonic)

4°C, sealed storage, away from moisture

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.3129 mL	11.5647 mL	23.1294 mL
	5 mM	0.4626 mL	2.3129 mL	4.6259 mL
	10 mM	0.2313 mL	1.1565 mL	2.3129 mL

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (4.81 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (4.81 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.81 mM); Clear solution

### **BIOLOGICAL ACTIVITY**

Description

Clidinium bromide is a quaternary amine antimuscarinic agent. Clidinium bromide may help symptoms of cramping and abdominal/stomach pain by decreasing stomach acid, and slowing the intestines in vivo $^{[1]}$ .

In Vivo

Clidinium (oral gavage; 0.25, 0.5, and 1 mg/kg; 3 days) causes constipation in mice. It leads to a significant decrease in %transit after clidinium treatment [(F(3, 28)=27.405] in mice<sup>[1]</sup>.

Clidinium (oral gavage; 0.25, 0.5, and 1 mg/kg; 3 days) has a significant effect on the clonic seizure threshold induced by intravenous PTZ which received clidinium (0.25, 0.5, and 1 mg/kg)  $[(F(3, 35) = 14.103)^{[1]}]$ .

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

Animal Model:	Male NMRI mice weighing 20-25 g <sup>[1]</sup>
Dosage:	0.25, 0.5, and 1 mg/kg
Administration:	Oral gavage; 0.25, 0.5, and 1 mg/kg; 3 days
Result:	Decreased the clonic seizure latency compared with control animals.

### **REFERENCES**

[1]. Leila Moezi, et al. Constipation Enhances the Propensity to Seizure in Pentylenetetrazole-Induced Seizure Models of Mice. Epilepsy Behav

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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