

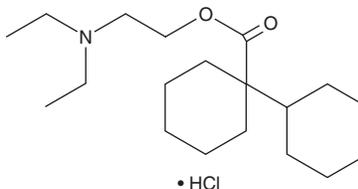
# PRODUCT INFORMATION



## Dicyclomine (hydrochloride)

Item No. 23867

**CAS Registry No.:** 67-92-5  
**Formal Name:** [1,1'-bicyclohexyl]-1-carboxylic acid, 2-(diethylamino)ethyl ester, monohydrochloride  
**Synonym:** Dicycloverine  
**MF:** C<sub>19</sub>H<sub>35</sub>NO<sub>2</sub> • HCl  
**FW:** 346.0  
**Purity:** ≥98%  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Dicyclomine (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the dicyclomine (hydrochloride) in water. The solubility of dicyclomine (hydrochloride) in water is approximately 50 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Dicyclomine is an M<sub>1</sub> and M<sub>2</sub> muscarinic acetylcholine receptor antagonist (K<sub>i</sub>s = 3.16 and 44.7 nM, respectively).<sup>1</sup> It inhibits inositol phosphate accumulation induced by the non-selective acetylcholine agonist carbamoylcholine (carbachol; Item No. 14486) in guinea pig cortex (K<sub>i</sub> = 12 nM; pA<sub>2</sub> = 7.88). Dicyclomine (10 mg/kg, i.v.) inhibits potassium-induced contraction of ileum, colon, and duodenum in anesthetized rats by 21.85, 30.81, and 37.86%, respectively.<sup>2</sup> Formulations containing dicyclomine have been used to treat functional and irritable bowel syndrome and to relieve muscle spasms in the gastrointestinal tract.

### References

1. Kunysz, E.L., Michel, A.D., and Whiting, R.L. Functional and direct binding studies using subtype selective muscarinic receptor antagonists. *Br. J. Pharmacol.* **93**(3), 491-500 (1988).
2. Subissi, A., Brunori, P., and Bachi, M. Effects of spasmolytics on K<sup>+</sup>-induced contraction of rat intestine *in vivo*. *Eur. J. Pharmacol.* **96**(3-4), 295-301 (1983).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

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