

# PRODUCT INFORMATION

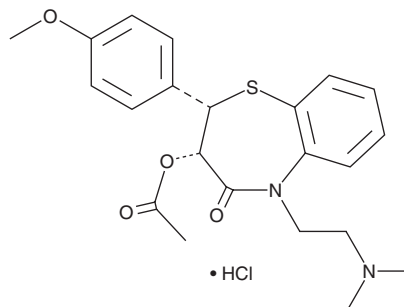


## Diltiazem (hydrochloride)

Item No. 20079

**CAS Registry No.:** 33286-22-5  
**Formal Name:** (2S,3S)-3-(acetyloxy)-5-[2-(dimethylamino)ethyl]-2,3-dihydro-2-(4-methoxyphenyl)-1,5-benzothiazepin-4(5H)-one, monohydrochloride

**Synonym:** (+)-*cis*-Diltiazem  
**MF:** C<sub>22</sub>H<sub>26</sub>N<sub>2</sub>O<sub>4</sub>S • HCl  
**FW:** 451.0  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 208, 238 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥5 years



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

### Description

Diltiazem (hydrochloride) (Item No. 20079) is an analytical reference standard that is functionally categorized as a calcium channel blocker.<sup>1</sup> It causes vasorelaxation and lowers blood pressure. Diltiazem is found as an adulterant in cocaine specimens.<sup>2</sup> This product is intended for research and forensic applications.

### References

1. Gutman, G.A., Chandy, K.G., Grissmer, S., *et al.* International Union of Pharmacology. LIII. Nomenclature and molecular relationships of voltage-gated potassium channels. *Pharmacol. Rev.* **57(4)**, 473-508 (2005).
2. Broséus, J., Gentile, N., and Esseiva, P. The cutting of cocaine and heroin: A critical review. *Forensic Sci. Int.* **262**, 73-83 (2016).

#### 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 06/20/2023

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM