

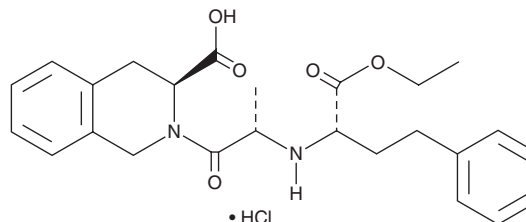
# PRODUCT INFORMATION



## Quinapril (hydrochloride)

Item No. 21439

**CAS Registry No.:** 82586-55-8  
**Formal Name:** 2-[[[(1S)-1-(ethoxycarbonyl)-3-phenylpropyl]amino]-1-oxopropyl]-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic acid, monohydrochloride  
**Synonyms:** CI-906, PD 109452-2  
**MF:** C<sub>25</sub>H<sub>30</sub>N<sub>2</sub>O<sub>5</sub> • HCl  
**FW:** 475.0  
**Purity:** ≥98%  
**Supplied as:** A crystalline 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

Quinapril (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the quinapril (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Quinapril (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of quinapril (hydrochloride) in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of quinapril (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of quinapril (hydrochloride) in PBS (pH 7.2) is approximately 3.33 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

Quinapril is a prodrug form of the angiotensin converting enzyme (ACE) inhibitor quinaprilat.<sup>1,2</sup> *In vivo*, quinapril (3 mg/kg) reduces mean arterial pressure in renal hypertensive and spontaneously hypertensive rats.<sup>2</sup> It inhibits angiotensin I-induced pressor responses in normotensive rats and dogs. Quinapril (10-200 mg/kg) prevents left ventricular heart failure in CHF 14.6 cardiomyopathic hamsters. Formulations containing quinapril have been used in the treatment of hypertension, heart failure, and diabetic nephropathy.

### References

1. Vago, T., Bevilacqua, M., Conci, F., *et al.* Angiotensin converting enzyme binding sites in human heart and lung: Comparison with rat tissues. *Br. J. Pharmacol.* **107(3)**, 821-825 (1992).
2. Kaplan, H.R., Taylor, D.G., and Olson, S.C. Quinapril: Overview of preclinical data. *Clin. Cardiol.* **13(6 Suppl. 7)**, VII6-VII12 (1990).

#### 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, 12/01/2022

#### 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