

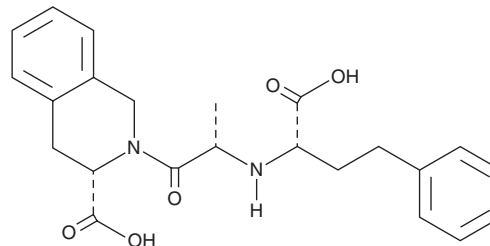
# PRODUCT INFORMATION



## Quinaprilat

Item No. 36007

**CAS Registry No.:** 82768-85-2  
**Formal Name:** (3S)-2-[(2S)-2-[[[(1S)-1-carboxy-3-phenylpropyl]amino]-1-oxopropyl]-1,2,3,4-tetrahydro-3-isoquinolinecarboxylic acid  
**Synonym:** CI-928  
**MF:** C<sub>23</sub>H<sub>26</sub>N<sub>2</sub>O<sub>5</sub>  
**FW:** 410.5  
**Purity:** ≥90%  
**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

Quinaprilat is supplied as a solid. A stock solution may be made by dissolving the quinaprilat in the solvent of choice, which should be purged with an inert gas. Quinaprilat is slightly soluble in DMSO and methanol.

### Description

Quinaprilat is an inhibitor of angiotensin-converting enzyme (ACE; IC<sub>50</sub> = 0.06 nM) and an active metabolite of the ACE inhibitor prodrug quinapril (Item No. 21439).<sup>1,2</sup> It inhibits calcium overload and rod to round cell shape change induced by lysophosphatidylcholine (LPC) in isolated rat cardiomyocytes when used at concentrations of 20 and 50 μM.<sup>2</sup> Quinaprilat (3 μg/kg) reduces the frequency of ventricular fibrillation in a dog model of myocardial ischemia and reperfusion injury.<sup>3</sup> It also reduces blood pressure and proteinuria in rat models of uranyl nitrate- or 5/6 nephrectomy-induced chronic renal failure when administered at a dose of 0.1 mg/kg.<sup>4</sup>

### References

1. Perich, R.B., Jackson, B., and Johnston, C.I. Structural constraints of inhibitors for binding at two active sites on somatic angiotensin converting enzyme. *Eur. J. Pharmacol.* **266(3)**, 201-211 (1994).
2. Ma, H., Hashizume, H., Hara, A., *et al.* Protective effect of quinaprilat, an active metabolite of quinapril, on Ca<sup>2+</sup>-overload induced by lysophosphatidylcholine in isolated rat cardiomyocytes. *Jpn. J. Pharmacol.* **79(1)**, 17-24 (1999).
3. Fujinaga, H., Wakatsuki, T., Nishikado, A., *et al.* Electrophysiologic effects of quinaprilat in dogs during acute myocardial ischemia and following reperfusion. *Coron. Artery Dis.* **9(10)**, 697-701 (1998).
4. Appenroth, D., Beutinger, R., Lupp, A., *et al.* Effects of a therapy with losartan and quinaprilat on the progression of chronic renal failure in rats after a single dose of uranyl nitrate or 5/6 nephrectomy. *Exp. Toxicol. Pathol.* **54(5-6)**, 359-366 (2003).

#### 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, 12/15/2022

#### 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