

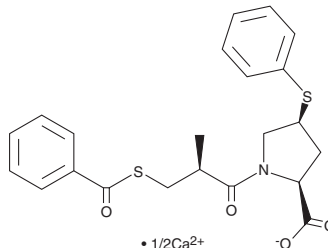
# PRODUCT INFORMATION



## Zofenopril (calcium salt)

Item No. 29525

**CAS Registry No.:** 81938-43-4  
**Formal Name:** (4S)-1-[(2S)-3-(benzoylthio)-2-methyl-1-oxopropyl]-4-(phenylthio)-L-proline, hemicalcium salt  
**Synonym:** SQ 26,911  
**MF:** C<sub>22</sub>H<sub>22</sub>NO<sub>4</sub>S<sub>2</sub> • 1/2Ca  
**FW:** 448.6  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 238 nm  
**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

Zofenopril (calcium salt) is supplied as a solid. A stock solution may be made by dissolving the zofenopril (calcium salt) in the solvent of choice, which should be purged with an inert gas. Zofenopril (calcium salt) is slightly soluble in methanol.

### Description

Zofenopril is a prodrug form of the angiotensin-converting enzyme (ACE) inhibitor zofenoprilat.<sup>1</sup> Zofenopril is hydrolyzed by cardiac esterases *in vivo* to form zofenoprilat. It inhibits ACE with an IC<sub>50</sub> value of 0.9 nM in heart tissue homogenates and inhibits cardiac ACE activity in isolated perfused rat hearts. It reduces mean arterial blood pressure in two kidney-one clip renal hypertensive (2K-1C) rats and spontaneously hypertensive rats (SHRs) when administered at doses of 2.2, 6.6, and 22 mg/kg.<sup>2</sup> Unlike the ACE inhibitor ramipril (Item No. 15558), zofenopril does not affect bronchoalveolar lavage fluid (BALF) levels of bradykinin or prostaglandin E<sub>2</sub> (PGE<sub>2</sub>; Item No. 14010) or increase coughing induced by citric acid in guinea pigs.<sup>3</sup>

### References

1. Grover, G.J., Sleph, P.G., Dzwonczyk, S., *et al.* Effects of different angiotensin-converting enzyme (ACE) inhibitors on ischemic isolated rat hearts: Relationship between cardiac ACE inhibition and cardioprotection. *J. Pharmacol. Exp. Ther.* **257**(3), 919-929 (1991).
2. DeForrest, J.M., Waldron, T.L., Krapcho, J., *et al.* Preclinical pharmacology of zofenopril, an inhibitor of angiotensin I converting enzyme. *J. Cardiovasc. Pharmacol.* **13**(6), 887-894 (1989).
3. Cialdai, C., Giuliani, S., Valenti, C., *et al.* Differences between zofenopril and ramipril, two ACE inhibitors, on cough induced by citric acid in guinea pigs: Role of bradykinin and PGE<sub>2</sub>. *Naunyn Schmiedebergs Arch. Pharmacol.* **382**(5-6), 455-461 (2010).

#### 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.

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