
Product Data Sheet

Product Name: Zofenopril

Cat. No.: GC37972

Chemical Properties

Cas. No. 81872-10-8

SMILES O=C(O)[C@H]1N(C([C@H](C)CSC(C2=CC=CC=C2)=O)=O)C[C@@H](SC3=CC=CC=C3)C1

Formula C₂₂H₂₃NO₄S₂

M.Wt

429.55

Solubility DMSO: 5 mg/mL (11.64 mM)

Storage

Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure **Background**

Zofenopril is a prodrug form of the angiotensin-converting enzyme (ACE) inhibitor zofenoprilat.¹ Zofenopril is hydrolyzed by cardiac esterases *in vivo* to form zofenoprilat. It inhibits ACE with an IC₅₀ 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.² Unlike the ACE inhibitor ramipril , zofenopril does not affect bronchoalveolar lavage fluid (BALF) levels of bradykinin or prostaglandin E₂ or increase coughing induced by citric acid in guinea pigs.³

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. *Cardiovasc.*

Caution: Product has not been fully validated for medical applications. For research use only.

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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 PGE2Naunyn Schmiedebergs Arch. Pharmacol.382(5-6)455-461(2010)

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