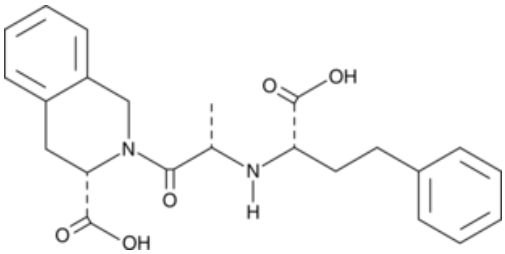
Product Data Sheet

Product Name: Quinaprilat
Cat. No.: GC52034

Chemical Properties

Cas. No.	82768-85-2		
SMILES	OC([C@H](CCC1=CC=CC=C1)N[C@@H](C)C(N2[C@@H](CC3=CC=CC=C3C2)C(O)=O)=O)=O		
Formula	C23H26N2O5	M.Wt	410.5
Solubility	DMSO: Slightly soluble,Methanol: Slightly soluble	Storage	-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

Quinaprilat is an inhibitor of angiotensin-converting enzyme (ACE; IC_{50} = 0.06 nM) and an active metabolite of the ACE inhibitor prodrug quinapril .[1,2] 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.[2] Quinaprilat (3 µg/kg) reduces the frequency of ventricular fibrillation in a dog model of myocardial ischemia and reperfusion injury.[3] 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.[4]

1.Perich, R.B., Jackson, B., and Johnston, C.I.Structural constraints of inhibitors for binding at two

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active sites on somatic angiotensin converting enzymeEur. 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 Ca2+-overload induced by lysophosphatidylcholine in isolated rat cardiomyocytesJpn. 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 reperfusionCoron. 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 nephrectomyExp. Toxicol. Pathol.54(5-6)359-366(2003)

Caution: Product has not been fully validated for medical applications. For research use only.
Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA