

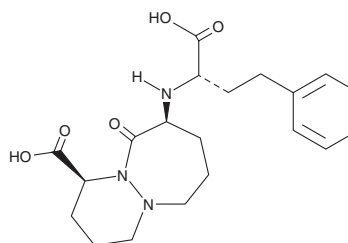
PRODUCT INFORMATION



Cilazaprilat

Item No. 38118

CAS Registry No.: 90139-06-3
Formal Name: (1S,9S)-9-[[[(1S)-1-carboxy-3-phenylpropyl] amino]octahydro-10-oxo-6H-pyridazino[1,2-a][1,2]diazepine-1-carboxylic acid
Synonym: Ro 31-3113
MF: C₂₀H₂₇N₃O₅
FW: 389.5
Purity: ≥98%
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

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

Description

Cilazaprilat is an inhibitor of angiotensin-converting enzyme (ACE; IC₅₀ = 0.7 nM for the rat enzyme) and an active metabolite of cilazapril (Item No. 29777).^{1,2} It decreases creatine kinase release in primary neonatal rat cardiac myocytes in an *in vitro* model of ischemia-reperfusion injury induced by hypoxia and reoxygenation when used at a concentration of 10 μM.³ Intra-arterial administration of cilazaprilat (3 μg/kg per minute) increases coronary blood flow and fractional shortening in a dog model of coronary hypoperfusion-induced myocardial ischemia.⁴

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. Takai, S., Matsuda, A., Usami, Y., *et al.* Hydrolytic profile for ester- or amide-linkage by carboxylesterases pI 5.3 and 4.5 from human liver. *Bio. Pharm. Bull.* **20(8)**, 869-873 (1997).
3. Matoba, S., Tatsumi, T., Keira, N., *et al.* Cardioprotective effect of angiotensin-converting enzyme inhibition against hypoxia/reoxygenation injury in cultured rat cardiac myocytes. *Circulation* **99(6)**, 817-822 (1999).
4. Kitakaze, M., Minamino, T., Node, K., *et al.* Beneficial effects of inhibition of angiotensin-converting enzyme on ischemic myocardium during coronary hypoperfusion in dogs. *Circulation* **92(4)**, 950-961 (1995).

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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