

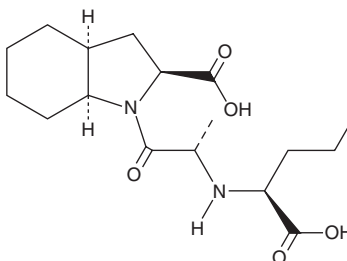
PRODUCT INFORMATION



Perindoprilat

Item No. 17574

CAS Registry No.: 95153-31-4
Formal Name: (2S,3aS,7aS)-1-[(2S)-2-[[[(1S)-1-carboxybutyl]amino]-1-oxopropyl]octahydro-1H-indole-2-carboxylic acid
Synonym: S-9780
MF: C₁₇H₂₈N₂O₅
FW: 340.4
Purity: ≥95%
Supplied as: A crystalline 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

Perindoprilat is supplied as a crystalline solid. A stock solution may be made by dissolving the perindoprilat in the solvent of choice, which should be purged with an inert gas. Perindoprilat is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of perindoprilat in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of perindoprilat can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of perindoprilat in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Perindoprilat is an inhibitor of angiotensin-converting enzyme (ACE; IC₅₀ = 1.05 nM) and an active metabolite of the ACE inhibitor prodrug perindopril (Item No. 20796).¹ It reduces expression of the mRNA encoding VEGF in KB oral squamous cell carcinoma cells when used at concentrations of 1 and 2 μM.² Perindoprilat, in combination with bradykinin, induces endothelium-dependent relaxation in isolated dog basilar and coronary arteries with 30% maximum induction (IC₃₀) values of 0.46 and 1.15 μM, respectively.³ *In vivo*, perindoprilat (20 μg/kg) reverses or prevents restricted oxygen-induced decreases in mean blood pressure, renal blood flow, and renal vascular resistance, as well as increases in the urine flow rate in an acute hypoxemia-induced rabbit model of renal hypoperfusion.⁴

References

1. Ceconi, C., Francolini, G., Olivares, A., *et al.* Angiotensin-converting enzyme (ACE) inhibitors have different selectivity for bradykinin binding sites of human somatic ACE. *Eur. J. Pharmacol.* 577(1-3), 1-6 (2007).
2. Yasumatsu, R., Nakashima, T., Masuda, M., *et al.* Effects of the angiotensin-I converting enzyme inhibitor perindopril on tumor growth and angiogenesis in head and neck squamous cell carcinoma cells. *J. Cancer Res. Clin. Oncol.* 130(10), 567-573 (2004).
3. Kerth, P.A. and Vanhoutte, P.M. Effects of perindoprilat on endothelium-dependent relaxations and contractions in isolated blood vessels. *Am. J. Hypertens.* 4(3 Pt 2), 226S-234S (1991).
4. Huet, R., Gouyon, J.-B., and Guignard, J.-P. Prevention of hypoxemia-induced renal dysfunction by perindoprilat in the rabbit. *Life Sci.* 61(22), 2157-2165 (1997).

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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