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: C_{17}H_{28}N_{2}O_{5}
FW: 340.4
Purity: ≥95%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid

Laboratory Procedures

For long term storage, we suggest that perindoprilat be stored as supplied at -20°C. It should be stable for at least two years.

Perindoprilat is supplied as a crystalline solid. A stock solution may be made by dissolving the perindoprilat in the solvent of choice. Perindoprilat is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. 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 the active metabolite of perindopril, an inhibitor of angiotensin converting enzyme (ACE) that has efficacy against hypertension.\(^1\) Perindoprilat specifically and competitively inhibits ACE in vitro with IC\(_{50}\) values ranging between 1.5 and 3.2 nM. Elimination of perindoprilat is decreased in the elderly and in patients with heart or renal failure.\(^1-3\)

References