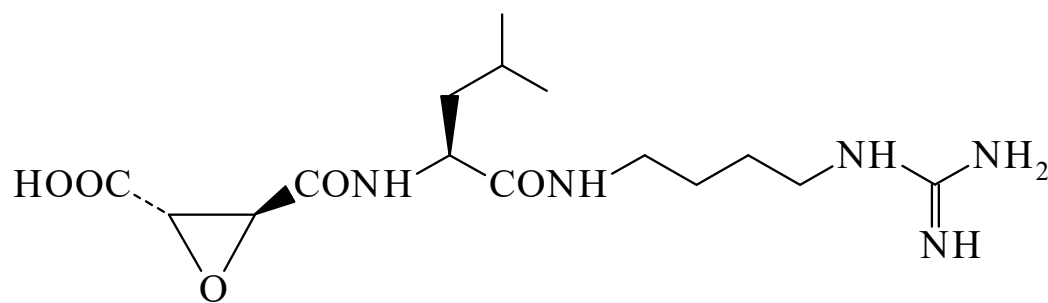




>>Entry Name: Rexostatine

Synonym(s): 3-[[[1-[[[4-[(Aminoiminomethyl)amino]butyl]amino]carbonyl]-3-methylbutyl]amino]carbonyl]oxiranecarboxylic acid, 9Cl. Proteinase inhibitor E 64. E 64



CAS Registry Number: 66701-25-5

Related CAS Registry Numbers(s): 66701-24-4

Molecular Formula: C₁₅H₂₇N₅O₅

Molecular Weight: 357.409

Accurate Mass: 357.20122

Percentage Composition: C 50.41%; H 7.61%; N 19.59%; O 22.38%

Biological Source: Isol. from *Aspergillus japonicus*

Use/Importance: Thiol proteinase inhibitor. Sensitizes human lung and colon carcinomas to antineoplastic chemotherapy

Physical Description: Needles (Me₂CO aq.)

Optical Rotation: $[\alpha]_D^{25} +24.4$ (c, 1 in 0.1M HCl)

Solubility: BERDY SOL: Sol. MeOH-H₂O, AcOH, DMSO, Py; fairly sol. EtOH; poorly sol. Me₂CO, hexane

Calculated Log P Data: Log P -1.71 (calc)

UV: [neutral] $\lambda_{\max}$ 0 (end) (ϵ) (MeOH aq.) (Derep) [neutral] $\lambda_{\max}$ (MeOH) (Berdy)

Other Data: Dec. at 231-234°

Hazard & Toxicity: Exp. teratogen

Fluka: 45370

Sigma: E3132

References:

- Hanada, K. *et al.*, *Agric. Biol. Chem.*, 1978, **42**, 523; 529; 537, (*isol, synth, struct, props*)
Hanada, K. *et al.*, *Pept. Chem.*, 1979, **17**, 31, (*synth, props*)
Barrett, A.J. *et al.*, *Acta Biol. Med. Ger.*, 1981, **40**, 1513, (*rev, pharmacol*)
Barrett, A.J. *et al.*, *Biochem. J.*, 1982, **201**, 189, (*props*)
Yamamoto, D. *et al.*, *Chem. Pharm. Bull.*, 1989, **37**, 2577; 1990, **38**, 2339, (*cryst struct, conformn*)
Tachikura, T., *Acta Paediatr. Jpn.*, 1990, **32**, 495, (*tox*)
Jani, J.P. *et al.*, *Cancer Res.*, 1992, **52**, 2931