

Product Information

Serine protease inhibitor Leupeptin hemisulfate, Purity ≥98%

Cat. No.: X24-07-ZQ779

Size: 25 mg; 50 mg; 100 mg

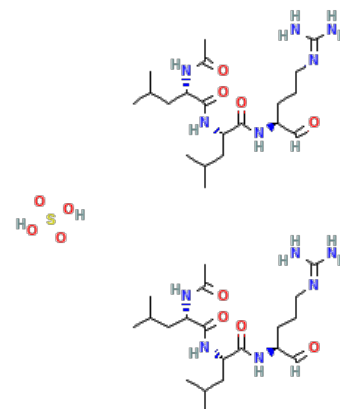
MDL: MFCD00037012

CAS Number: 103476-89-7

Compound CID: 2733491

Synonym: 103476-89-7; Serine protease inhibitor

This product is for research use only and is not intended for diagnostic use.



Product Information

Description	Leupeptin hemisulfate, soluble in warmed DMSO, water and ethanol, is a molecule that plays a crucial role in regulating various physiological processes by inhibiting the activity of serine proteases. It targets Cysteine protease and serine protease.
Molecular Weight	475.6
Molecular Formula	C ₂₀ H ₃₈ N ₆ O ₄ · 1/2H ₂ SO ₄
Targets	Cysteine protease; serine protease
IUPAC Name	(2S)-2-acetamido-N-[(2S)-1-[[[(2S)-5-(diaminomethylideneamino)-1-oxopentan-2-yl]amino]-4-methyl-1-oxopentan-2-yl]-4-methylpentanamide;sulfuric acid
InChI	InChI=1S/2C20H38N6O4.H2O4S/c2*1-12(2)9-16(24-14(5)28)19(30)26-17(10-13(3)4)18(29)25-15(1-27)7-6-8-23-20(21)22;1-5(2,3)4/h2*11-13,15-17H,6-10H2,1-5H3,(H,24,28)(H,25,29)(H,26,30)(H4,21,22,23);(H2,1,2,3,4)/t2*15-,16-,17-;/m00./s1
InChI Key	CIPMKIHUGVGQTG-VFFZMTJFSA-N
Canonical SMILES	CC(C)CC(C(=O)NC(CC(C)C)C(=O)NC(CCCN=C(N)N)C(=O)NC(=O)C.CC(C)CC(C(=O)NC(CC(C)C)C(=O)NC(CCCN=C(N)N)C(=O)NC(=O)C.OS(=O)(=O)O
Isomeric SMILES	CC(C)C[C@@H](C(=O)N[C@@H](CC(C)C)C(=O)N[C@@H](CCCN=C(N)N)C(=O)NC(=O)C.CC(C)C[C@@H](C(=O)N[C@@H](CC(C)C)C(=O)N[C@@H](CCCN=C(N)N)C(=O)NC(=O)C.OS(=O)(=O)O
Form	Lyophilized powder
Purity	≥98%
Solubility	Warmed DMSO: 90 mg/mL (189.24 mM); Water: 90 mg/mL (189.24 mM); Ethanol: 90 mg/mL (189.24 mM)



Identity	Confirmed by NMR/HPLC/MS.
Stability	The product is stable for three years when stored at the recommended temperature in lyophilized powder.
Quality Level	Research grade
Applications	Leupeptin hemisulfate is applied to research its ability to inhibit serine proteases, impacting processes such as protein degradation and cellular regulation.
Storage	Store at -20°C, and keep desiccated.