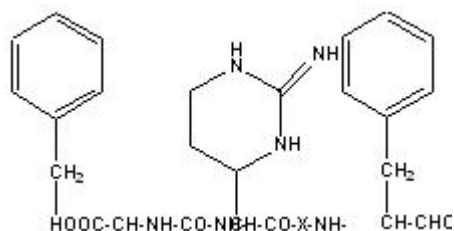


TECHNICAL INFORMATION

Catalog Number: 152845

Chymostatin

Structure:



	Approximate %	Molecular Weight	X =
Chymostatin A	79-89%	607.7	L-Leu
Chymostatin B	12-17%	593.7	L-Val
Chymostatin C	5-15%	607.7	L-Ile

Average Molecular Formula: C₃₁H₄₁O₆N₇

Average Molecular Weight: 605.04

CAS # : 9076-44-2

Physical Appearance: White to yellowish powder

Synonym: [(S)-1-Carboxy-2-phenylethyl]-carbamoyl-a-[2-iminohexahydro-4(S)- pyrimidyl]- (S)-Gly-X-Phe-al;

N-(Nalpha-carbonyl-[S,S]-a-(2-iminohexahydro-4-pyrimidyl) glycine-X-Phe-al)-Phe;

N-(Nalpha-carbonyl-capreomycidine-X-Phe-al)-Phe

Source: *Microbiol*

Solubility: Soluble in glacial acetic acid (10 mg/ml - clear, colorless to yellow solution), DMSO; very slightly soluble in water, short-chain alcohols; insoluble in ethyl acetate, butyl acetate, ether, hexane, petroleum ether and hexane.^{1,4}

Stock solutions can also be made in 0.1 M HCl but 10 mM stock solutions can be prepared in DMSO and are stable for months when aliquoted and stored at -20°C. Dilute solutions (10 to 100 uM) are stable for several hours.⁵

Description: Chymostatin is a reversible protease inhibitor, inhibiting chymotrypsin, chymotrypsin-like serine proteases, chymases and lysosomal cysteine proteinases such as cathepsins B, H and L.^{5,6} It weakly inhibits human leucocyte elastase.⁷ It is effective at a final concentration of 100-200 ug/ml (10 to 100 uM), although the working solution is not stable (the terminal aldehyde is subject to oxidation). Useful in protease inhibitor cocktails for plant extracts.⁵

[Click Here for a list of other protease inhibitors offered by MP Biomedicals and general protease inhibitor information.](#)

Reference:

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