

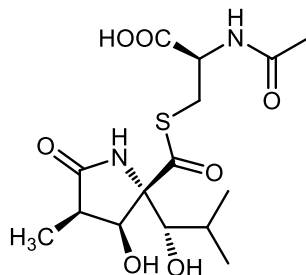
Catalog # 10-1314

Lactacystin

Fermentation product from *Streptomyces lactacystinaeus*

CAS# 133343-34-7

Lot # X102940



Specific inhibitor of three proteolytic activities of the proteasome. Chymotrypsin-like activity is inhibited most potently followed by trypsin-like activity. Inhibition of the peptidyl-glutamyl peptide hydrolytic activity is relatively weak.

- 1) Omura *et al.* (1991), *Lactacystin, a novel microbial metabolite, induces neuritogenesis of neuroblastoma cells* ; J. Antibiot., **44** 113
- 2) Fenteany *et al.* (1995), *Inhibition of proteasome activities and subunit-specific amino-terminal threonine modification by lactacystin* ; Science, **268** 726

PHYSICAL DATA

Molecular Weight:	376.37
Molecular Formula:	C ₁₅ H ₂₄ N ₂ O ₇
Purity:	98% by TLC NMR (Conforms)
Solubility:	DMSO (up to 20 mg/ml) , water (up to 10 mg/ml), or ethanol (up to 1 mg/ml)
Physical Description:	White solid – lyophilized, vials may appear empty upon visual inspection
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 1 month. Aqueous solutions should be used within one working day and should not be stored. Lactacystin is subject to hydrolysis in aqueous solutions.

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