



## Product Information

Product ID L0107

CAS No. 133343-34-7

Chemical Name

Synonym

Formula  $C_{15}H_{24}N_2O_7S$

Formula Wt. 376.43

Melting Point

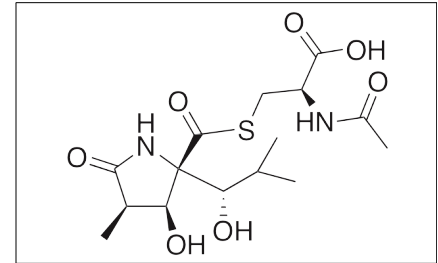
Purity  $\geq 98\%$

Solubility Soluble DMSO or water.

Store Temp  $-20^{\circ}C$

Ship Temp Ambient

**Description** Lactacystin is a proteasome inhibitor initially produced by *Streptomyces* that exhibits hepatoprotective, anti-metastatic, and anticancer chemotherapeutic activities. Lactacystin increases the Bax/Bcl-2 ratio and inhibits proliferation of cells and growth of tumors in models of glioma. Additionally, lactacystin inhibits growth and migration of smooth muscle cells. In animal models of intestinal ischemia/reperfusion-induced liver injury, lactacystin inhibits activation of NF- $\kappa$ B, suppresses infiltration of neutrophils, and decreases levels of ICAM-1.



**Bulk quantities available upon request**

Product ID	Size
L0107	100 $\mu$ g
L0107	200 $\mu$ g
L0107	500 $\mu$ g
L0107	1 mg

**References** Wang H, Zhang S, Zhong J, et al. The proteasome inhibitor lactacystin exerts its therapeutic effects on glioma via apoptosis: an in vitro and in vivo study. *J Int Med Res.* 2013 Feb;41(1):72-81. PMID: 23569132.

Barringhaus KG, Matsumura ME. The proteasome inhibitor lactacystin attenuates growth and migration of vascular smooth muscle cells and limits the response to arterial injury. *Exp Clin Cardiol.* 2007 Fall;12(3):119-24. PMID: 18650992.

Yao JH, Li YH, Wang ZZ, et al. Proteasome inhibitor lactacystin ablates liver injury induced by intestinal ischaemia-reperfusion. *Clin Exp Pharmacol Physiol.* 2007 Nov;34(11):1102-8. PMID: 17880361.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.