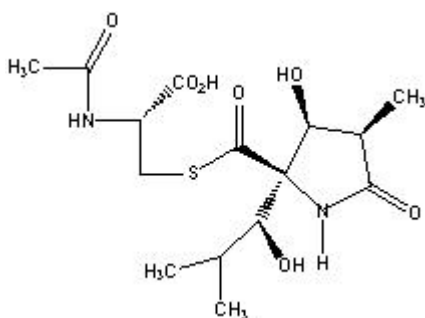


TECHNICAL INFORMATION

Catalog Number: 195863

Lactacystin

Structure:



Molecular Formula: C₁₅H₂₄N₂O₇S

Molecular Weight: 376.4

CAS # 133343-34-7

Physical Appearance: White lyophilized powder

Source: Synthetic

Solubility: Soluble in water (10 mg/ml). Soluble and stable in DMSO, MeCN. Also soluble in aqueous buffers but subject to hydrolysis. For best results, pellet dry compound by centrifugation prior to DMSO addition. Store solutions aliquoted and at -20° C for up to 3 months.

Description: A potent and selective proteasome inhibitor which affects all three ATP-independent activities of 20S proteasome (inhibition of chymotrypsin- and trypsin-like proteases are irreversible; pep. glu-like is reversible)⁴. Highly specific, viz. 100 mM has no effect on chymotrypsin, trypsin or papain after 48 hrs⁴. Radiolabeling of cells/crude extracts labels primarily X/MB1 proteasome subunit (24 kD) and to a lesser extent, the proteasome α-chain (~30kD).⁴ Inhibits NF-KB activation (IC₅₀ = 10 mM)¹. Induces neurite outgrowth in Neuro 2A mouse neuroblastoma cells³.

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

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