

CERTIFICATE OF ANALYSIS

PRODUCT:	Lactacystin (synthetic), C ₁₅ H ₂₄ N ₂ O ₇ S, M.W.376.4, CAS# [133343-34-7]
PRODUCT NUMBER:	L-1147
LOT NUMBER:	B1921
APPEARANCE:	White solid
SOLUBILITY:	Soluble in acetonitrile (20 mg/ml), 100% ethanol (1 mg/ml), methanol, DMSO (20 mg/ml), dimethyl formamide (20 mg/ml) or water (10 mg/ml).
PURITY:	≥99%
PRODUCT DESCRIPTION:	Key inhibitor for use in proteasome research. A potent and selective irreversible proteasome inhibitor. Specifically inhibits 26S proteasome (MCP; multicatalytic proteinase complex). Blocks proteasome activity by targeting the catalytic β-subunit. Has no effect on serine or cysteine proteases. Induces apoptosis in human monoblast U937 cells. Also inhibits NF-κB activation by inhibiting IκB degradation. Inhibits the ubiquitin proteasome pathway in cell culture (IC ₅₀ = 10μM). Inhibits cathepsin A. Upregulates HSP70 and HSP22, suggesting an initial neuroprotective pathway. Induces neurite outgrowth in Neuro 2A mouse neuroblastoma cells.
USE/STABILITY:	Organic stock solutions are stable for 3 months when stored at -20°C. Subject to hydrolysis in aqueous buffers. We do not recommend storing aqueous solutions for more than one day.

A.G. Scientific, Inc.

6450 Lusk Blvd. Suite E102

SAN DIEGO, CA

92121



STORAGE & HANDLING: Store at -20°C . Avoid freeze/thaw cycles.
PROTECT FROM LIGHT!

CAUTION: For research use only. Not for human or drug use. The pharmacological and toxicological properties of this product have not been fully investigated. Use caution when handling. Do not use this compound if you are not fully trained or are unaware of the hazards involved.

Verified: DD