Lactacystin (Synthetic)

CATALOG #: 1709-200

AMOUNT: 200 μg

STRUCTURE:

MOLECULAR FORMULA: C₁₅H₂₄N₂O₇S

MOLECULAR WEIGHT: 376.42

CAS NUMBER: 133343-34-7

APPEARANCE: White solid

SOLUBILITY: DMSO (20 mg/ml) or water (5 mg/ml)

PURITY: ≥95% by HPLC

STORAGE: Store at -20°C.

DESCRIPTION: Cell-permeable. A potent and selective inhibitor of the 20 S

proteasome. Binds irreversibly to the active site N-terminal threonine residue of the catalytic β -subunit of the 20S proteasome, thereby inhibiting its chymotrypsin and trypsin-like activities. Induces neurite outgrowth in Neuro 2A neuroblastoma cells and has been reported to induce apoptosis in human monoblast U937 cells. Also inhibits NF- κ B

activation (IC₅₀ = 10 μ M).

REFERENCES: Fenteany, G., et al. (1995). Science **268**, 726-731.

HANDLING: Do not take internally. Wear gloves and mask when handling

the product! Avoid contact by all modes of exposure.

FOR RESEARCH USE ONLY! Not to be used in humans.

RELATED PRODUCTS:

- MG-132 (Cat. No. 1703-5)
- Clasto-Lactacystin β lactone (Cat. No. 1710-100)