

(R)-MG132

Catalog #: w37237

Lot #: 120628

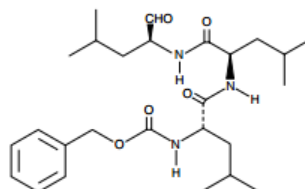
Size: 1 mg

Structure:

CAS Registry #: 1211877-36-9

Purity: ≥98%

Chemical Formula: C₂₆H₄₁N₃O₅



Molecular Weight: 475.6

Description: (*R*)-MG132 is a potent, cell permeable and reversible inhibitor of proteasomes. It can inhibit proteasome activity in lysates of J558L multiple myeloma cells and EMT6 breast cancer cells. In comparison to (*S*)-MG132, the (*R*)-MG132 stereoisomer is a more effective inhibitor of chymotrypsin-like (ChTL), trypsin-like (TL), and peptidylglutamyl peptide hydrolyzing proteasome (PGPH) activities.

Appearance: A crystalline solid

Solubility: Soluble in ethanol, DMSO and DMF, purged with an inert gas. Solubility in these solvents is approximately 25 mg/ml. Do not store aqueous solutions for more than one day.

Biological Activity: (*R*)-MG132 inhibits ChTL, TL and PGPH with IC₅₀ values of 0.22 μM, 34.4 μM, and 2.95 μM, respectively.

Storage/Stability: Store at or below -20°C for up to two years.

Quality Control: The purity was determined by HPLC analysis.

Reference(s):

1. Lee, D.H., *et al.*, *Trends Cell Biol.* 1998;**8**:397-403
2. Elliot, P.J., *et al.*, *J. Mol. Med.* 2003;**81**:235-245
3. Mroczkiewicz, M., *et al.*, *J. Med. Chem.* 2010;**53**:1509-1518.