

### (R)-MG132

**Catalog #:** w37237

**Lot #:** 140724

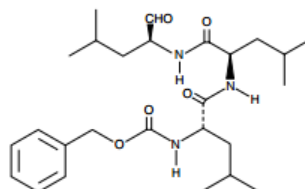
**Size:** 1 mg

**Structure:**

**CAS Registry #:** 1211877-36-9

**Purity:** ≥98%

**Chemical Formula:** C<sub>26</sub>H<sub>41</sub>N<sub>3</sub>O<sub>5</sub>



**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 IC<sub>50</sub> 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.