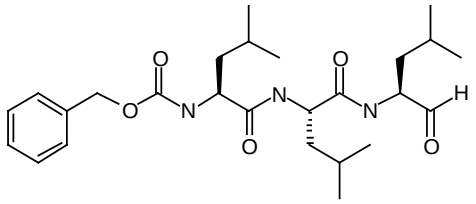
Lot # XXXXX

BostonBiochem

MATERIAL DATA SHEET

Z-Leu-Leu-Leu-CHO (MG-132)
Cat. # I-130

Peptide aldehydes form a covalent hemiacetal adduct with the 20S proteasome, inhibiting the chymotrypsin-like peptidase activity (IC_{50} = 100 nM). These inhibitors are reversible and cell-permeable, and also inhibit the activity of calpains (IC_{50} = 1.2 μM) and cathepsins. Inhibits TNF-α-induced NF-κB activation and IκBα degradation. Induces neurite outgrowth in PC12 cells and has anticancer properties *in vitro*.

Product Information	
Quantity:	5 mg
Formula:	$C_{26}H_{41}N_3O_5$ **FW:** 475.63
Structure:	

Physical/Chemical Characteristics	
Solubility:	Soluble to 100 mM in both DMSO and Ethanol Note: Pellet may have oily appearance.
Purity:	> 95% by HPLC.
Activity:	K_i = 4.2 nM vs. SDS-activated 20S proteasome.

Use & Storage	
Use:	Add from DMSO stock directly to *in vitro* or *in vivo* assays at desired concentration. Pre-incubation with compound prior to assay is recommended for maximal effect.
Storage:	Store stock solution at -20°C. Avoid multiple freeze/thaw cycles.

840 Memorial Drive, Cambridge, MA 02139 Phone: 617-576-2210 FAX: 617-492-3565
www.bostonbiochem.com

Literature

References:

Adams J., *et al.* (1998) Bioorg. Med. Chem. Lett. **8**:333-338
Lee D.H. and Goldberg A.L. (1998) Tren. Cell. Biol. **8**:397-403
Lee D.H. and Goldberg A.L. (1996) J. Biol. Chem. **271**:27280-27284
McCormack T.A, *et al.* (1998) Biochem. **37**:7792-7800
Wilk S., *et al.*, (1993) Enz. Prot. **47**:306-313

For Laboratory Research Use Only, Not For Use in Humans

Rev: 07/25/2014

840 Memorial Drive, Cambridge, MA 02139 Phone: 617-576-2210 FAX: 617-492-3565
www.bostonbiochem.com