

Catalog No. 11216-042 5 mg

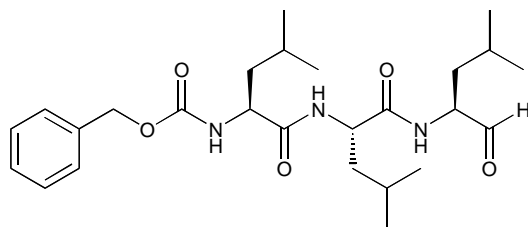
PRODUCT: MG-132
Z-Leu-Leu-Leu-CHO

CAS NO: 133407-82-6

CATALOG NO.: 11216-042

SIZE: 5 mg

STRUCTURE:



PHYSICAL APPEARANCE: White solid (m.p. 120-121°C)

MOLECULAR FORMULA: C₂₆H₄₁N₃O₅ MOLECULAR WEIGHT: 475.6

PURITY: 98% (TLC: 10% MeOH/methylene chloride; R_f = 0.33)

SOLUBILITY: Soluble in DMSO(25 mg/ml) and ethanol(25 mg/ml)

STORAGE: Store, as supplied, at -80°C for up to 1 year. May be stored at -20°C for up to 1 week. Store solutions at -80°C for up to 2 months.

APPLICATION NOTES: A potent, cell permeable and selective proteasome inhibitor (K_i = 4 nM).¹ Inhibits NF-κB activation by preventing IκB degradation (IC₅₀ = 3 μM).¹ Blocks degradation of short-lived proteins, which in turn induces HSP and ER chaperone expression, leading to thermotolerance (1 μM MG-132, 2 h.).² Stimulates neurite outgrowth in PC12 cells (20 nM optimal).³ IC₅₀'s for inhibition of Suc-LLVY-AMC and Z-LLL-AMC cleaving activities of proteasome were 0.85 and 0.1 μM respectively. The product is not sterile.

- REFERENCES:
1. J.Adams and R.Stein *Ann.Rep.Med.Chem.* 1996 **31** 279
 2. K.T.Bush *et al. J.Biol.Chem.* 1997 **272** 9086
 3. S.Tsubuki *et al. J.Biochem.(Tokyo)* 1996 **119** 572

The pharmacological and toxicological properties of this product have not been fully investigated. Exercise caution in use and handling. This product must not be used in humans.