E1B1748

MG-132
Proteasome Inhibitor

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MG-132

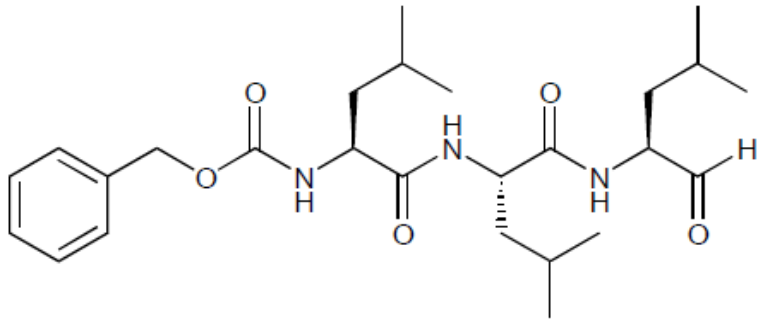
Z-Leu-Leu-Leu-CHO

CAS NO: 133407-82-6

CATALOG NO.: E1B1748

Package: 1mg (20mg/ml in DMSO, 50ul)

STRUCTURE:



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

MOLECULAR FORMULA: C26H41N3O5

MOLECULAR WEIGHT: 475.6

PURITY: 98% (TLC: 10%MeOH/methylene chloride; Rf = 0.33). Peptide content: 100%

SOLUBILITY: Soluble in: DMSO (25 mg/ml); Ethanol (25 mg/ml)

STORAGE: Store, as supplied, at -80°C for up to 2 years. 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 (Ki = 4 nM). Inhibits NF-κB activation by preventing NF-κB degradation (IC50 = 3 μM). Blocks degradation of short-lived proteins, which in turn induces HSP and ER chaperone expression, leading to thermotolerance (1 μM MG-132, 2 h.). Stimulates neurite outgrowth in PC12 cells (20 nM optimal). IC50's for inhibition of Suc-LLVY-AMC and Z-LLL-AMC cleaving activities of proteasome were 0.85 and 0.1 μM respectively.

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.