MG-132

A potent proteasome inhibitor that blocks protein degradation, crucial for investigating protein turnover and the ubiquitin-proteasome pathway.

MG-132 is a potent, cell permeable and selective proteasome inhibitor (K_i = 4nM).1 It inhibits NF-κB activation by preventing IκB degradation (IC_{50} = 3μM). The peptide blocks degradation of short-lived proteins, which in turn induces HSP and ER chaperone expression, leading to thermotolerance (1μM MG-132, 2 h.). It also stimulates neurite outgrowth in PC12 cells (20nM optimal). The peptide has also been reported to increase the survival rate of mesenchymal stem cells following their transplantation. IC_{50}'s for inhibition of Suc-LLVY-AMC and Z-LLL-AMC cleaving activities of proteasome were 0.85 and 0.1μM respectively. The ubiquitin-proteasome system (UPS) and autophagy serve as two complementary, reciprocally regulated protein degradation systems, thus blockade of UPS by MG-132 activates autophagy.

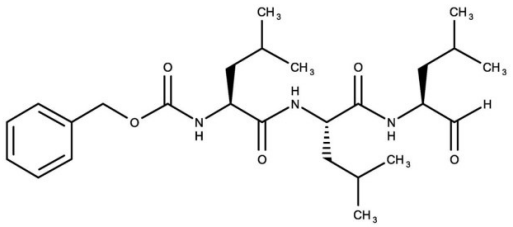
Citations: 145 View Online »

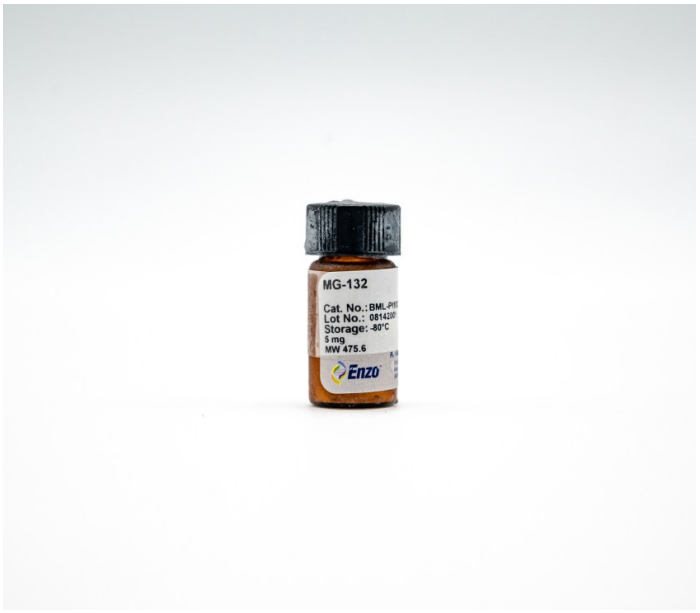
Ordering Information Order Online »

BML-PI102-0005	5mg
BML-PI102-0025	25mg

Manuals, SDS & CofA View Online »

- High purity peptide
- Most economical MG-132 on the market
- Widely cited for more than two decades
- Well-characterized with a variety of applications




MG-132
Cat. No.:
Lot No.:
Storage: -80°C
5 mg
MW 475.6
Enzo

Handling & Storage

Use/Stability	As indicated on product label or CoA when stored as recommended. Solutions are stable for up to one week if stored at -20°C. Solutions are stable for up to two months if stored at -80°C.
Long Term Storage	-80°C
Shipping	Dry Ice

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	Z-LLL-CHO
Appearance	White solid.
CAS	133407-82-6
Formula	$C_{26}H_{41}N_3O_5$
MW	475.6
Purity	≥98%
Sequence	Z-Leu-Leu-Leu-CHO
Solubility	Soluble in DMSO (25mg/ml) or 100% ethanol (25mg/ml).
Technical Info / Product Notes	Replacement for **ADI-HPK-116</strong**

Last modified: May 29, 2024

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