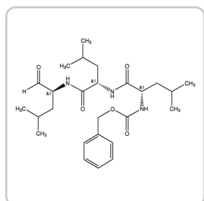


Saisir le nom du produit, le numéro de lot, etc.

[Toutes les photos \(2\)](#)

Documents

[↓ FDS](#)[🔍 COA/CoQ](#)[Plus de documents »](#)**474790** ▶ **Sigma-Aldrich.**

MG-132 - CAS 133407-82-6 - Calbiochem

★★★★★ (0)

A cell-permeable, potent, reversible proteasome inhibitor ($K_i = 4 \text{ nM}$).

Synonyme(s):

Z-Leu-Leu-Leu-al, Carbobenzoxy-L-leucyl-L-leucyl-L-leucinal, Z-LLL-CHO, Proteasome Inhibitor XI, MG-132

Empirical Formula (Hill Notation):

 $\text{C}_{26}\text{H}_{41}\text{N}_3\text{O}_5$ Numéro CAS: **133407-82-6**

Poids moléculaire: 475.62

Numéro MDL: **MFCD00674886**

NACRES: NA.77

Référence	Conditionnement	Disponibilité	Prix	Quantité	
474790-1MG	1 MG	✓ Disponible pour expédition le 06 octobre 2022	68,40 €	- +	i
474790-5MG	5 MG	✓ Disponible pour expédition le 06 octobre 2022	211,00 €	- +	i
474790-10MG	10 MG	✓ Disponible pour expédition le 06 octobre 2022	281,00 €	- +	i
474790-20MG	20 MG	✓ Disponible pour expédition le 06 octobre 2022	351,00 €	- +	i

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≥90% (HPLC)

CC(C)C[C@H](C(=O)N[C@@H](CC(C)C)C(=O)N[C@@H](CC(C)C)C(=O)OC(=O)Cc1ccccc1)C(=O)N[Consulter le prix et la disponibilité](#)

Niveau de qualité	100
Essai/Dosage	≥98% (HPLC)
Forme	solid
manufacturer/tradename	Calbiochem®
Conditions de stockage	OK to freeze
Couleur	white

Solubilité	DMSO: 20 mg/mL ethanol: 20 mg/mL
Expédié(e)s dans	ambient
Temp. de stockage	-20°C
SMILES string	<chem>[H]C(=O)[C@H](CC(C)C)NC(=O)[C@H](CC(C)C)NC(=O)[C@H](CC(C)C)NC(=O)OCc1ccccc1</chem>
InChI	1S/C26H41N3O5/c1-17(2)12-21(15-30)27-24(31)22(13-18(3)4)28-25(32)23(14-19(5)6)29-26(33)34-16-20-10-8-7-9-11-20/h7-11,15,17-19,21-23H,12-14,16H2,1-6H3,(H,27,31)(H,28,32)(H,29,33)/t21-,22-,23-/m0/s1
InChI key	TZYWCYJVHRLUCT-VABKMULXSA-N

Vous recherchez des produits similaires ? Visitez [Guide de comparaison des produits](#)

DESCRIPTION

Amino Acid Sequence

Z-Leu-Leu-Leu-al

Description générale

A potent, reversible, and cell-permeable proteasome inhibitor ($K_i = 4 \text{ nM}$). Reduces the degradation of ubiquitin-conjugated proteins in mammalian cells and permeable strains of yeast by the 26S complex without affecting its ATPase or isopeptidase activities. Activates c-Jun N-terminal kinase (JNK1), which initiates apoptosis. Inhibits NF- κ B activation ($IC_{50} = 3 \mu\text{M}$). Also reported to increase the survival rate of mesenchymal stem cells following their transplantation. Prevents β -secretase cleavage.

A 10 mM (1 mg/210 μl) solution of MG-132 (Cat. No. **474791**) in DMSO is also available. This material is $\geq 98\%$ pure by HPLC. A material with $\geq 95\%$ purity by HPLC (Cat. No. **474787**) is also available.

Potent, reversible, and cell-permeable proteasome inhibitor ($K_i = 4 \text{ nM}$). Reduces the degradation of ubiquitin-conjugated proteins in mammalian cells and permeable stains of yeast by the 26S complex without affecting its ATPase or isopeptidase activities. Activates c-Jun N-terminal kinase (JNK1) which initiates apoptosis. Inhibits NF- κB activation ($\text{IC}_{50} = 3 \mu\text{M}$). Also reported to increase the survival rate of mesenchymal stem cells following their transplantation.

Conditionnement

1, 5, 10 mg in Plastic ampoule

Actions biochimiques/physiologiques

Cell permeable: yes

Primary Target
proteasome

Product does not compete with ATP.

Reversible: yes

Target IC_{50} : $3 \mu\text{M}$ against NF- κB activation

Target K_i : 4 nM against proteasome

Avertissement

Toxicity: Standard Handling (A)

Séquence

Z-Leu-Leu-Leu-CHO

Reconstitution

Following reconstitution, aliquot and freeze (-20°C). Stock solutions are stable for up to 1 month at -20°C .

Autres remarques

Li, Z.W. et al. 2011. Sheng Li Xue Bao. 63, 525.

Steinhilb, M.L., et al. 2001. *J. Biol. Chem.* **276**, 4476.

Meriin, A.B., et al. 1998. *J. Biol. Chem.* **273**, 6373.

Adams, J., and Stein, R. 1996. *Ann. Rep. Med. Chem.* **31**, 279.

Klafki, H.W., et al. 1996. *J. Biol. Chem.* **271**, 2865.

Lee, D.H., and Goldberg, A.L., 1996. *J. Biol. Chem.* **271**, 27280.

Wiertz, E.J., et al. 1996. *Cell* **84**, 769.

Jensen, T.J., et al. 1995. *Cell* **83**, 129.

Read, M.A., et al. 1995. *Immunity* **2**, 493.

Rock, K.L., et al. 1994. *Cell* **78**, 761.

Informations légales

CALBIOCHEM is a registered trademark of Merck KGaA, Darmstadt, Germany

INFORMATIONS SUR LA SÉCURITÉ

**Code de la classe de
stockage**

11 - Combustible Solids

WGK

WGK 3

DOCUMENTATION

Certificat d'analyse

Saisir un numéro de lot pour rechercher un certificat d'analyse (COA).

Numéro de lot

e.g. 023J5431

Comment saisir un numéro de lot (COA)

Rechercher

Certificat de qualité

Saisir un numéro de lot pour rechercher un certificat de qualité (CoQ).

Référence

e.g. T1503

Numéro de lot

e.g. 023J5431

Comment saisir un numéro de lot (CoQ)

Rechercher

Brochures

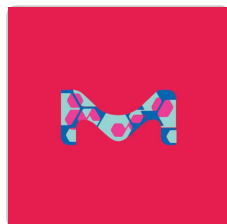
Caspases and other Apoptosis Related Tools Brochure

Plus De Documents

Structure Search

EDC

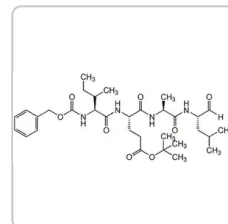
LES CLIENTS ONT ÉGALEMENT CONSULTÉ



Sigma-Aldrich

5.04314**Bortezomib - CAS 179324-69-7 - Calbiochem**

Bortezomib, CAS 179324-69-7, is a cell-permeable, selective, slowly reversible inhibitor of 20S proteasome...

[Consulter le prix et la disponibilité](#)

Sigma-Aldrich

539160**Proteasome Inhibitor I - Calbiochem**

The Proteasome Inhibitor I controls the biological activity of Proteasome. This small molecule/inhibitor is...

[Consulter le prix et la disponibilité](#)

ARTICLES REVUS PAR DES PAIRS

Phylogenetic debugging of a complete human biosynthetic pathway transplanted into yeast.

Neta Agmon et al.*Nucleic acids research*, 48(1), 486-499 (2019-11-21)

Cross-species pathway transplantation enables insight into a biological process not possible through traditional approaches. We replaced the enzymes catalyzing the entire *Saccharomyces cerevisiae* adenine de novo biosynthesis pathway with the human pathway. While the 'humanized' yeast grew in the absence

Aberrant activation of neuronal cell cycle caused by dysregulation of ubiquitin ligase Itch results in neurodegeneration.

Monika Chauhan et al.*Cell death & disease*, 11(6), 441-441 (2020-06-10)

It is critical for the neuronal cell cycle to remain suppressed in terminally differentiated neurons as its activation results in aberrant cell cycle re-entry that causes neuronal apoptosis (CRNA), which has been observed in several neurodegenerative disorders like Alzheimer's disease

Deubiquitinating enzyme amino acid profiling reveals a class of ubiquitin esterases.

Virginia De Cesare et al.

Proceedings of the National Academy of Sciences of the United States of America, 118(4) (2021-01-23)

The reversibility of ubiquitination by the action of deubiquitinating enzymes (DUBs) serves as an important regulatory layer within the ubiquitin system. Approximately 100 DUBs are encoded by the human genome, and many have been implicated with pathologies, including neurodegeneration and

Lipid droplet-associated kinase STK25 regulates peroxisomal activity and metabolic stress response in steatotic liver.

Annika Nerstedt et al.

Journal of lipid research, 61(2), 178-191 (2019-12-21)

Nonalcoholic fatty liver disease (NAFLD) and nonalcoholic steatohepatitis (NASH) are emerging as leading causes of liver disease worldwide and have been recognized as one of the major unmet medical needs of the 21st century. Our recent translational studies in mouse

RSK2 Maintains Adult Estrogen Homeostasis by Inhibiting ERK1/2-Mediated Degradation of Estrogen Receptor Alpha.

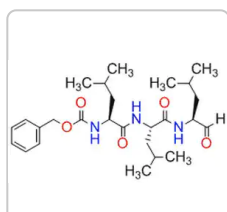
Katarzyna A Ludwik et al.

Cell reports, 32(3), 107931-107931 (2020-07-23)

In response to estrogens, estrogen receptor alpha (ER α), a critical regulator of homeostasis, is degraded through the 26S proteasome. However, despite the continued presence of estrogen before menopause, ER α protein levels are maintained. We discovered that ERK1/2-RSK2 activity oscillates during

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PRODUITS CONSULTÉS RÉCEMMENT

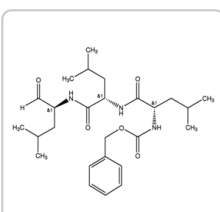


Sigma-Aldrich

474788

InSolution MG-132 in EtOH, $\geq 95\%$ by HPLC - Calbiochem

Potent, reversible, and cell-permeable proteasome



Sigma-Aldrich

474787

MG-132, $\geq 95\%$ by HPLC - CAS 133407-82-6 - Calbiochem

Potent, reversible, and cell-permeable proteasome

inhibitor. Reduces the degradation of ubiquitin-...

inhibitor ($K_i = 4 \text{ nM}$).[Consulter le prix et la disponibilité](#)[Consulter le prix et la disponibilité](#)

Évaluations

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Questions

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