

MATERIAL DATA SHEET

Z-Leu-Leu-Glu-AMC (Z-LLE-AMC)

Cat. S-230

Fluorogenic substrate for measuring the peptidylglutamyl peptide-hydrolyzing activity of the 20S proteasome. The 20S complex is composed of 28 subunits, arranged in an $\alpha_7\beta_7\beta_7\alpha_7$ stoichiometry. Each of the two internal β -type rings harbors three different proteolytically active sites, provided by the amino-terminal residues of three constitutive subunits: $\beta 1$ (post-glutamyl peptide hydrolase site), $\beta 2$ (trypsin-like site) and $\beta 5$ (chymotrypsin-like site).

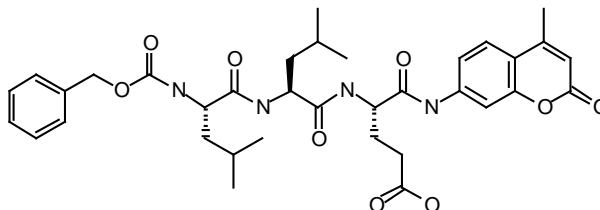
Product Information

Quantity: 5 mg

Formula: $C_{35}H_{44}N_4O_9$

Formula Weight: 664.8

Structure:



Physical/Chemical Characteristics

Stock: Lyophilized from a solution of deionized water and acetonitrile

Purity: > 95% by TLC, HPLC. Structure confirmed by NMR.

Use & Storage

Use: Z-LLE-AMC is a fluorogenic substrate for measuring the peptidylglutamyl peptide-hydrolyzing activity of the 20S proteasome. Release of AMC fluorescence can be monitored with an excitation wavelength of 345 nm and an emission wavelength of 445 nm. Reaction conditions will need to be optimized for each specific application.

Storage: Store DMSO stock at -20°C . Avoid multiple freeze/thaw cycles.

Literature

- References:** Arendt C. S. and Hochstrasser M. (1997) Proc. Natl. Acad. Sci. **94**: 7156
Coux O., *et al.* (1996) Ann. Rev. Biochem. **65**: 801
Dick T. P., *et al.* (1998) J. Biol. Chem. **273**: 25637
Kisselev A. F., *et al.* (1999) Mol. Cell. **4**: 395
Orlowski M., *et al.* (1993) Biochem. **32**: 1563

For Laboratory Research Use Only, Not For Use in Humans

Rev: 10/27/2014

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

www.bostonbiochem.com

The contents of this datasheet (unless otherwise noted) are Copyright © 2008 Boston Biochem, Inc. All rights reserved. Duplication in whole or in part is strictly prohibited without the express written consent of Boston Biochem, Inc. "Boston Biochem" is a Trademark of Boston Biochem, Inc., 840 Memorial Drive, Cambridge, MA 02139.