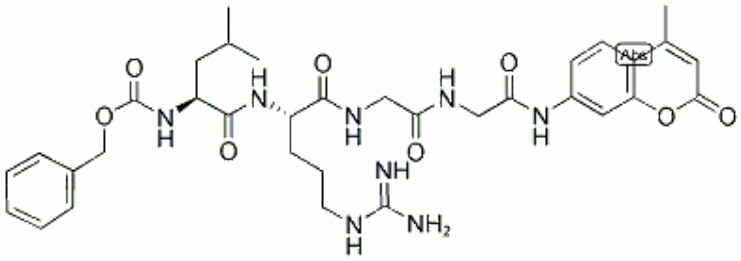
Lot # XXXXX

BostonBiochem

MATERIAL DATA SHEET

Z-Leu-Arg-Gly-Gly-AMC (Z-LRGG-AMC)
Cat # S-100

S-100 is a fluorogenic peptide substrate for some Ubiquitin C-terminal hydrolases (UCH's) and Isopeptidase T. This low molecular weight peptide represents a minimal sequence of C-terminal residues of Ubiquitin where hydrolysis occurs at the UbGly^{76}-X bond. The catalytic efficiency for hydrolysis of this substrate by deconjugating enzymes is several thousand-fold less than a more native substrate (Ubiquitin-AMC or Ubiquitin-Rh110, Cat # U-550 or U-555) because remote interactions between enzymes and Ubiquitin substrates stabilize catalytic transition states.

Product Information	
Quantity:	5 mg
Formula:	$C_{34}H_{44}N_8O_8$ **Formula Weight:** 692.76
Structure:	

Physical/Chemical Characteristics	
Solubility:	Soluble at ≥ 20 mM in DMSO. For best results, pellet dry compound prior to reconstitution. Solubilize at desired stock concentration.
Purity:	> 95% by HPLC.

Use & Storage	
Use:	Add from DMSO stock directly to assay at desired concentration. Reaction conditions will need to be optimized for each specific application. We recommend an initial starting concentration of 10-100 µM. Release of AMC generates a fluorescence that can be monitored with an excitation wavelength of 345 nm and an emission wavelength of 445 nm.
Storage:	Store lyophilized powder or stock solution at -20°C. Avoid multiple freeze/thaw cycles.

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

Literature

References:

Dang L.C. *et al.* (1998) Biochemistry **37**: 1868
Mayer A.N. & Wilkinson K.D. (1989) Biochemistry **28:** 166
Stein R.L., *et al.* (1995) Biochemistry **34**: 12616
Wilkinson K.D., *et al.* (1995) Biochemistry **34**: 14535
Wold W.S.M. & Tollefson A.E. (2008) Meth. Mol. Med. **131**: 251

For Laboratory Research Use Only, Not For Use in Humans

Rev: 09/30/2014

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