

Native Clostridium histolyticum Clostripain, Sequencing Grade

Cat. No. Clostripain-02C **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Tissue total protein is prepared from whole tissue homogenates and presents a consistent pattern on SDS-PAGE analysis.
Species	Clostridium histolyticum
Description	Clostripain (Endoproteinase-Arg-C) is a two chain proteinase associated with collagenase and isolated from Clostridium histolyticum. It is highly specific for the carboxyl peptide bond of arginine. Clostripain has a sulfhydryl requirement; it is activated by dithiothreitol, cysteine, or other sulfhydryl containing reagents. The presence of calcium ions is essential. The enzyme is inhibited by oxidizing agents and sulfhydryl reactants and by Co ²⁺ , Cu ²⁺ , Cd ²⁺ , and heavy metal ions. Citrate, borate, and Tris anions are less inhibitory.
Form	A dialyzed, lyophilized, pre-activated powder.
Bio-activity	≥50 units per mg dry weight
CAS #	9028-00-6
Molecular Mass	53.0 kDa Light chain: 12.5 kDa Heavy chain: 45 kDa
Specificity	Clostripain selectively hydrolyzes arginyl bonds and lysyl bonds at a lower rate. It can also act as a transpeptidase with maximal activity at pH 7.6-9.0.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Extinction Coefficient	87,890 cm ⁻¹ M ⁻¹ (Theoretical) E1%,280= 16.57 (Theoretical)
Isoelectric point	4.8-4.9
Optimal pH	7.4-7.8 (activity against a-benzoyl-arginine ethyl ester)
Activators	Sulfhydryl requirement: dithiothreitol, cysteine, or other reducing agents Calcium ion is essential Reducing agents
Inhibitors	EDTA Oxidizing agents Sulfhydryl reagents (such as TLCK) Co ²⁺ , Cu ²⁺ , Cd ²⁺ , and heavy metal ions Citrate, borate and Tris anions partially inhibit
Unit Definition	One Unit hydrolyzes one micromole of N-benzoyl-L-arginine ethyl ester per minute at 25 centigrade, pH 7.6, in the presence of dithiothreitol.
Applications	Peptide mapping Sequence analysis Cell isolation Hydrolysis/condensation of amide bonds Peptide synthesis
Storage	Store at 2-8 centigrade.

GENE INFORMATION

Official Symbol Clostripain

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Synonyms	Clostripain; Endoproteinase-Arg-C; CAS 9028-00-6; EC: 3.4.22.8
-----------------	--

UniProt ID	P09870
-------------------	------------------------

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA