

## microbial collagenase

Cat. No. EXWM-4311

Lot. No. (See product label)

### Introduction

**Description** Six species of metalloendopeptidase acting on native collagen can be isolated from the medium of *Clostridium histolyticum*. Class I has forms  $\alpha$  (68 kDa),  $\beta$  (115 kDa) and  $\gamma$  (79 kDa); class II has  $\Delta$  (100 kDa),  $\epsilon$  (110 kDa) and  $\zeta$  (125 kDa). The two classes are immunologically crossreactive, but have significantly different sequences, and different specificities such that their actions on collagen are complementary. The enzymes also act as peptidyl-tripeptidases. Variants of the enzyme have been purified from *Bacillus cereus*, *Empedobacter collagenolyticum*, *Pseudomonas marinoglutinosa*, and species of *Vibrio*, *Vibrio* B-30 (ATCC 21250) and *V. alginolyticus* (previously *Achromobacter iophagus*). Also known from *Streptomyces* sp.. The *Vibrio* enzyme is the type example of peptidase family M9.

**Synonyms** *Clostridium histolyticum* collagenase; clostridiopeptidase A; collagenase A; collagenase I; *Achromobacter iophagus* collagenase; collagenase; aspergillopeptidase C; nucleolysin; azocollase; metallocollagenase; soycollagestin; *Clostridium histolyticum* proteinase A; clostridiopeptidase II; MMP-8; clostridiopeptidase I; collagen peptidase; collagen protease; collagenase MMP-1; metalloproteinase-1; kollaza; matrix metalloproteinase-1; MMP-1; matrix metalloproteinase-8; matrix metalloproteinase-18; interstitial collagenase

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 3.4.24.3

**CAS No.** 9001-12-1

**Reaction** Digestion of native collagen in the triple helical region at  $\downarrow$ Gly bonds. With synthetic peptides, a preference is shown for Gly at P3 and P1', Pro and Ala at P2 and P2', and hydroxyproline, Ala or Arg at P3'

**Notes** This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

### Storage and Shipping Information

**Storage** Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.