Creative Enzymes®

Cysteine protease from Streptococcus pyogenes, Recombinant

Cat. No. NATE-1600

Lot. No. (See product label)

Introduction

Description	Cysteine protease is an enzyme for single site digestion of antibodies in the hinge region. Incubation for one hour at 37°C under reducing conditions is enough for cysteine protease to cleave all subclasses of human, mouse, rat, goat and sheep IgG. Cysteine protease is supplied as lyophilized powder with no preservatives added and is available in a 2000 units pack size. Cysteine protease contains a His-tag and can easily be removed after digestion.
Synonyms	Cysteine protease; FabULOUS

Product Information

Species	Streptocoocus pyogenes
Source	E.coli
Appearance	White to light yellow powder
Form	Lyophilized powder with no preservatives added
Purity	> 95% homogeneity as determined by SDS-PAGE analysis using Coomassie Blue detection.
Optimum pH	7.0-7.5
Buffer	Cysteine protease cleaves IgG in commonly used buffers with pH ranging from 6.5 to 8.0 and best activity is obtained at 37°C. The enzyme requires reducing agent in the digestion reaction and depending on the reducing conditions there is a chance that the interchain thiols will be reduced.
Unit Definition	One unit digests > 95% of 1µg human or mouse IgG when incubated in 10 mM Tris, 150 mM NaCl pH 7.4 at 37°C for 1 hour.

Storage and Shipping Information

Storage	at -20°C
Stability	The enzyme is reconstituted by addition of water and after reconstitution it is stable for 1 month at +4-8°C. The product is shipped on ice and should be stored at -20°C upon arrival.