Creative Enzymes®

Native E. coli PreScission Protease

Cat. No. NATE-0877

Lot. No. (See product label)

Introduction

Description	PreScission Protease is a fusion protein of glutathione S-transferase (GST) and human rhinovirus (HRV) type 14 3C protease . The protease specifically recognizes a subset of sequences which include the core amino acid sequence Leu-Phe-Gln/Gly-Pro cleaving between the Gln and Gly residues . Substrate recognition and cleavage are likely to be dependent not only upon primary structural signals, but also upon the secondary and tertiary structures of the fusion protein as well.
Applications	During cleavage reactions, it is recommended that samples be removed at various time points and analyzed by SDS-PAGE to estimate the yield, purity, and extent of digestion. The amount of PreScission Protease, temperature and length of incubation required for complete digestion of a given GST fusion partner may vary depending on the fusion partner. Optimal conditions for each fusion should be determined in pilot experiments. Digestion may be improved by adding Triton X-100, Tween 20, Nonidet, or NP40 to a concentration of 0.01%. Concentrations of these detergents up to 1% do not inhibit PreScission Protease.
Synonyms	PreScission Protease; PSP

Product Information

Source	E. coli
Appearance	Sterile colorless liquid.
Purity	>90% by SDS-PAGE
Activity	>10000 IU/mg
Optimum pH	7.0±0.5
Buffer	50 mM Tris-HCl, pH 7.0 (at 25 °C), 150 mM NaCl, 1 mM EDTA, 1 mM dithiothreitol. Chill to 5 °C prior to use.
Unit Definition	One unit is defined as the amount of enzyme needed to cleave 100 µg of fusion protein in 16 hours to 90% completion at 5°C in a buffer containing 50 mM Tris-HCl, pH 7.0, 150 mM NaCl, 1 mM EDTA, and 1 mM DTT.

Storage and Shipping Information

Storage	Should be stored in small aliquots at -20°C to -80°C for long term.