Creative Enzymes®

# Native E. coli PreScission Protease

*Cat. No. NATE-0877*

*Lot. No.* (See product label)

## Introduction

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| ***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

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| ***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

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