

**ChemWhat Technical Data Sheet (TDS)**

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<b>Catalog Number:</b>	461-03
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Description:</b>	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.
<b>Quantity:</b>	100IU/250IU/5000IU
<b>Unit Definition:</b>	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.
<b>Physical Appearance:</b>	Sterile colorless liquid.
<b>Cleavage Buffer:</b>	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.
<b>Recommended Conditions for Cleavage of a Fusion Protein:</b>	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 or Nonidet™ P40 to a concentration of 0.01 %. Concentrations of these detergents up to 1 % do not inhibit PreScission Protease.
<b>Stability &amp; Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 6 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 3 months, -20 to -70 °C under sterile conditions after opening.</li></ul>
<b>Usage:</b>	<b>ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. NOT FOR HUMAN USE</b>

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***PreScission Protease***

PreScission protease is a cysteine protease derived from human rhinovirus – HRV3C Protease. rPP is a fusion protein of glutathione S-transferase (GST) and human rhinovirus (HRV) type 14 3C protease. It specifically recognizes the amino acid sequences which include the core site of Leu-Phe-Gln-Gly-Pro and cleaves 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 super structures of the fusion protein. rPP works most effective at 4°C and can digest substrates at room temperature as well.