



Product Data Sheet

□ Cat # RP-433

Recombinant Protease

Size: □ 50 IU

□ 150 IU

**Description:**

Protease Recombinant 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.

The Recombinant Protease is purified by proprietary chromatographic techniques.

**Source:**

Escherichia Coli.

**Physical Appearance:**

Sterile filtered colorless solution.

**Cleavage Buffer:**

50mM Tris-HCl, pH-7.0 (at 25°C), 150mM NaCl, 1mM EDTA, 1mM dithiothreitol. Chill to 5°C prior to use.

**Cleavage Conditions:**

For Cleavage of a Fusion Protein: 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.

**Stability:**

Protease Recombinant although stable at 14°C for 1 week, should be stored desiccated below -18°C.

Please prevent freeze thaw cycles.

**Unit Definition:**

One unit will cleave ≥90% of 100 µg of a test GST-fusion protein in Cleavage Buffer (50mM Tris-HCl, 150 mM NaCl, 1 mM EDTA, 1 mM DTT, pH 7.0 at 25°C) at 5°C for 16 hours.

**Storage and stability**

This item is for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals. If supplied in powder then reconstitute it in 100 µl water for 1 mg/ml stock and store in liquid at 4°C for ~1 week or aliquots in suitable size and store at -20°C for long term storage..

Rev. 80307F