Creative Enzymes®

# SUMO Protease 1 (His-tagged) from Yeast, Recombinant

*Cat. No. NATE-1709*

*Lot. No.* (See product label)

## Introduction

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| ***Description*** | SUMO (Small Ubiquitin-like MOdifiers) Protease 1 (Ulp1, Ubl-specific protease 1 from Saccharomyces cerevisiae) is a highly active cysteine protease. It is highly specific as it recognizes the tertiary structure of the ubiquitin-like (UBL) protein, SUMO (Smt3), rather than its amino acid sequence. SUMO fusion tag, as an N-terminal fusion partner, has been shown to enhance functional protein production in prokaryotic and eukaryotic expression systems with significantly improved protein stability and solubility. The SUMO Protease 1 can be used to cleave SUMO protein tag from recombinant SUMO-fusion proteins. The optimal temperature for cleavage is 30°C; however, the enzyme is active over wide ranges of temperature and pH. After the completion of the cleavage reaction, the protease can be easily removed from the reaction by affinity chromatography using the Ni chelating resin. |
| ***Synonyms*** | Ulp1 peptidase; SUMO Protease; SUMO Protease |

## Product Information

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| ***Species*** | Yeast |
| ***Source*** | E. coli |
| ***Form*** | Liquid |
| ***EC Number*** | EC 3.4.22.68 |
| ***Molecular Weight*** | 28.7 kDa (403-621 aa + N-terminal Poly-His tag). |
| ***Purity*** | > 90% by SDS-PAGE |
| ***Activity*** | 1 X 10^6 units/mg |
| ***Concentration*** | 0.1 mg/ml |
| ***Unit Definition*** | One unit is defined as the amount of EZCut™ SUMO Protease 1 required to cleave >90% of 5 µg a control protein substrate (SUMO-GFP) in 1 h at 37°C. |
| ***Notes*** | INTENDED FOR RESEARCH USE ONLY, NOT FOR USE IN HUMAN, THERAPEUTIC OR DIAGNOSTIC APPLICATIONS. |

## Storage and Shipping Information

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| ***Storage*** | Store at -80°C. Stable for at least 1 year as supplied. It may be further diluted to 0.01-0.05 mg/ml with 50 mM Tris-HCl, 100 mM NaCl, 5 mM DTT and 20% glycerol pH 8.0 and stored at –20°C in aliquots. Avoid repeated freezing and thawing cycles. |