

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

Cat. No. NATE-1709

Lot. No. (See product label)

Introduction

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

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 10⁶ 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

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.