Creative Enzymes®

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

Cat. No. NATE-1708

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 Glutathione 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	52.6 kDa (403-621 aa + N-terminal GST).
Purity	> 90% by SDS-PAGE
Activity	>10,000 units/mg
Concentration	1 mg/ml
Unit Definition	One unit is defined as the amount of 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 0.1-0.5 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.