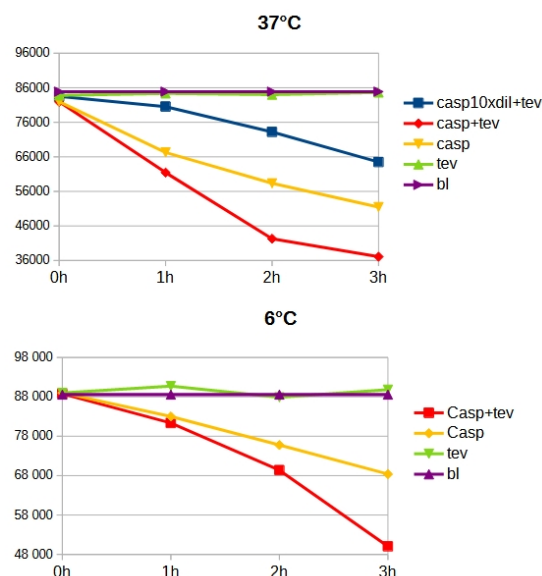


Catalog #	2737
Synonyms	Recombinant Human Caspase-3, Cold-adapted Casp-3
Type	Recombinant
Source	E. coli
Species	Human
Tag	His6
Form	Liquid
Purity	>95% by SDS PAGE
Shipping	Ice pack



Introduction

Pro-Caspase-3 protease is a genetically modified human sequence-specific cysteine protease. Caspase-3 is a member of the interleukin-1 beta converting enzyme family and participates on key cellular processes such as apoptosis.

Description

This recombinant protease is genetically improved human Casp3, which is intrinsically active, but the activity can be increased 10x by TEV protease. It contains His6 tag located at the N-terminus of the protein, which allows it to be immobilized on Ni-based affinity resins and removed from the cleavage reaction. It is active over a wide range of temperatures (4-40°C). The optimum is 37°C, however, it is active at 4°C as well for processing of temperature sensitive targets. The preferred recognition sequence is DEVD. Please use our [FRET Caspase-3 substrate](#) as a positive control.

Application

Cleavage of affinity tags from fusion proteins after protein purification. It cleaves fusion proteins directly in solution or immobilized on affinity resins. 1 U cleaves 1 nmol of the substrate in 1 hour at 37°C. The specific activity of this enzyme is 5 U/ug of purified enzyme. The enzymes supplied by Protean Ltd. are manufactured in certified environment under ISO 9001 and ISO 13485 international standards, which fully qualifies them for a use in downstream GMP certified processes.

Purification method

Affinity chromatography

Formulation

10mM Tris pH 7,5, 50mM KCl, 1 mM DTT , 40% glycerol

Specificity

Highly specific and active for its eight-amino acid sequence with minimal off-target effects. The activity depends on the type of target protein. The optimal amount of enzyme should be tested for each target protein.

Storage

-20°C, do not store at -80°C

Analyte specific reagent (ASR) manufactured under ISO 13485.

Country of origin: Czech Republic