



Catalog # 2737

Recombinant Human

Synonyms Caspase-3, Cold-adapted

Casp-3

Type Recombinant

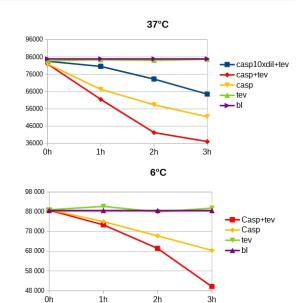
Source E. coli Species Human

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 (4-40C). The optimum is 37C, however, it is active at 4C as well for processing of temperature sensitive targets. The preferred recognition sequence is DEVD. Please use our <u>FRET Caspase-3 substrate</u> 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 37C. 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 gualifies 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**

-20C, do not store at -80C

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# Analyte specific reagent (ASR) manufactured under ISO 13485. Country of origin: Czech Republic