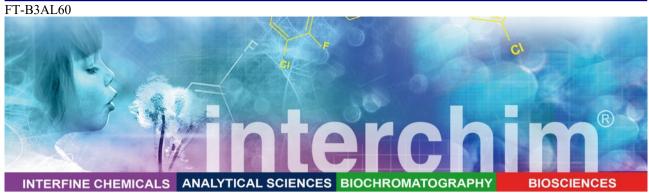
# InterBioTech



# **Active Recombinant Human Caspase-3**

## **Product Description**

Catalog #: B3AL60, 5 µg

B3AL61, 10 μg

Name: Active Recombinant Human Caspase-3

**Unit Definition:** One unit of the recombinant caspase-3 is the enzyme activity that cleaves 1 nmol of the

caspase substrate DEVD-pNA (pNA: p nitroanaline) per hour at 37 ° C in a reaction solution containing 50 mM Hepes, pH 7.2, 50 mM NaCl, 0.1% Chaps, 10 mM EDTA, 5%

Glycerol, and 10 mM DTT.

**Source:** E. coli

Physical Appearance: Freeze-dried powder with additives

Reconstitution: Reconstitute to 1 unit per  $\mu$ l in water.

**Specific Activity :**  $\geq 15,000 \text{ units/mg}$ 

Storage: The lyophilized caspase-3 is stable for 1 year at -70 ° C. Following reconstitution in water,

the enzyme should be aliquoted and immediately stored at -70  $^{\circ}$  C. Avoid multiple

freeze/thaw cycles as activity might decrease.

For Research Use Only

#### Introduction

Caspase-3 (also know as CPP32, Yama and apopain) is a major member of the caspase- family of cysteine proteases. Caspase-3 exists in cells as an inactive 32 kDa proenzyme. During apoptosis procaspase-3 is processed at aspartate residues by self-proteolysis and/or cleavage by upstream caspases, such as caspase-6 (Mch2), caspase-8 (Flice) and granzyme B. The processed form of caspase-3 consists of large (17 kD) and small (11 kD) subunits which associate to form the active enzyme. The active caspase-3 has been shown involving in the proteolysis of several important molecules, such as poly (ADP-ribose) polymerase (PARP), the sterol regulatory element binding proteins (SREBPs), focal adhesion kinase (FAK), and others. The recombinant active human caspase-3 expressed in E. coli spontaneously undergoes auto processing to yield subunits characteristic of the native enzyme (Full length gene Accession No. NP\_004337). The active caspase-3 preferentially cleaves caspase-3 substrates (e.g., DEVD-AFC or DEVD-pNA) and is routinely tested for its ability to enzymatically cleave these two substrates Ac-DEVD-pNA (Cat. No. FP-BI0930) or Ac-DEVD-AFC (Cat. No. FP-R11477A).

### **Directions for use**

## **Solubility**

Active caspase-3 is useful in studying enzyme regulation, determining target substrates, screening caspase inhibitors, or as a positive control in caspase activity assays. We recommend using 1 unit/assay for analyzing caspase activity. For a complete caspase-3 assay protocol, please refer to Caspase-3/CPP32 Fluorometric or Colorimetric Assay Kits (Cat No: GDA200 or AXEX10).



FT-B3AL60

# **Ordering information**

Catalog size quantities and prices may be found at <a href="http://www.interchim.com">http://www.interchim.com</a>. Please inquire for higher quantities (availability, shipment conditions).

Please contact InterBioTech – Interchim for any other information Hotline: +33(0)4 70 03 73 06 – Interbiotech@interchim.com

**Disclaimer:** Materials are sold **for research use only**, and are not intended for food, drug, household, or cosmetic use. Interchim® is not liable for any damage resulting from handling or contact with this product.