



## Active Recombinant Human Caspase-8

### INTRODUCTION

Caspase-8 is a member of the interleukin-1  $\beta$  converting enzyme (ICE) family of cysteine proteases. Like other caspases, caspase-8 also exists in cells as an inactive pro-enzyme. During apoptosis procaspase-8 is processed at aspartate residues by self proteolysis and/or cleavage by another caspase. The processed form consists of large and small subunits, which associate to form the active caspase-8 enzyme.

### ITEM(S) SUPPLIED

Catalog #	Description	Size
RCH-008	Active Recombinant Human Caspase-8 (Lyophilized)	25 Units x 1 vial

### STORAGE CONDITIONS

It is shipped in blue ice. The lyophilized caspase-8 is stable for 1 year at  $-70^{\circ}\text{C}$ . Following reconstitution in PBS, the enzyme should be aliquoted and stored at  $-70^{\circ}\text{C}$ .

**Note:** Avoid multiple freeze/thaw cycles as activity might decrease.

### UNIT DEFINITION

One unit of the recombinant caspase-8 is the enzyme activity that cleaves 1 nmol of the caspase substrate IETD-pNA (pNA: p-nitroaniline) per hour at  $37^{\circ}\text{C}$  in a reaction solution containing 50mM HEPES (pH 7.2), 50 mM NaCl, 0.1% CHAPS, 10mM EDTA, 5% Glycerol, and 10mM DTT.

**Specific Activity:** 5,000 units/mg.

### PREPARATION BEFORE USE

Reconstitute the supplied Active Recombinant Casapse-8 to 1 unit per  $\mu\text{l}$  in PBS.

### APPLICATIONS AND USAGE

The active recombinant human caspase-8 was expressed in *E. coli*. The active caspase-8 effectively cleaves caspase8 substrates (e.g., IETD-AFC, LETD-AFC or IETD-pNA). Active caspase-8 enzyme is useful in screening caspase inhibitors, studying enzyme regulation and kinetics and determining target substrate. It also can be used a positive control in caspase-8 activity assays. We recommend using 1 unit per assay for analyzing caspase activity.

### RELATED PRODUCTS:

#### 1. *CasPASE<sup>TM</sup>-Apoptosis Assay Kit* (Cat # 786-200 to 786-206)

The assay kit provides a simple method for assaying various caspases activity. For details, visit our web site at [www.GBiosciences.com](http://www.GBiosciences.com).

#### 2. *CasPASE Substrates and Inhibitors*

Ready to use caspase substrates and inhibitors are provided individually as well as in sets. For details, visit our web site at [www.GBiosciences.com](http://www.GBiosciences.com) or contact us.

**NOTE:** For other related products, visit our web site at [www.GBiosciences.com](http://www.GBiosciences.com) or contact us.

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