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A Geno Technology, Inc. (USA) brand name

# Active Recombinant Human Caspase-1

(Cat. RCH-001)



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## INTRODUCTION

Caspase-1 is a member of the caspase family of cysteine proteases. It exists in cells as an inactive 45 kDa pro-enzyme. The pro-enzyme is matured by proteolysis to yield large (20 kDa) and small (10 kDa) subunits. The active enzyme is a heterotetramer consisting of two large and two small subunits.

## ITEM(S) SUPPLIED (Cat. #RCH-001)

Description	Size
Active Recombinant Human Caspase-1 (Lyophilized)	25 Units x 1 vial

## STORAGE CONDITIONS

It is shipped in blue ice. The lyophilized caspase-1 is stable for 1 year at -70°C. Following reconstitution in PBS, the enzyme should be aliquoted and stored at -70°C.

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

## UNIT DEFINITION

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

**Specific Activity:** 8,000Units/mg

## PREPARATION BEFORE USE

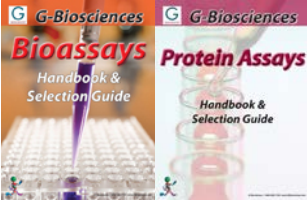
Reconstitute the supplied Casapse-1 to 1 unit per µl in PBS.

## APPLICATIONS AND USAGE

The active recombinant human caspase-1 was expressed in *E. coli*. The active caspase-1 preferentially cleaves caspase-1 substrates (e.g., YVAD-AFC or YVAD-pNA). In combination with caspase-I activity assays, the enzyme is useful in screening caspase inhibitors, studying enzyme regulation and kinetics and determining target substrate. It also can be used as a positive control in caspase-I activity assays. We recommend using 1 unit per assay for analyzing caspase activity.

## RELATED PRODUCTS

Download our Bioassays and Protein Assays Handbook.



<http://info2.qbiosciences.com/complete-bioassay-handbook>

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