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A Geno Technology, Inc. (USA) brand name

# Active Recombinant Human Caspase-2

(Cat. # RCH-002)



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## INTRODUCTION

Caspase-2 is a member of the interleukin-1  $\beta$  converting enzyme (ICE) family of cysteine proteases. Caspase-2 exists in cells as an inactive pro-enzyme and is processed at aspartate residues by self-proteolysis and/or cleavage by upstream caspases during apoptosis. The processed form of caspase-2 consists of large (19kDa) and small (12kDa) subunits, which associate to form the active enzyme. The active recombinant caspase-2 cleaves caspase-2 chromogenic substrate Ac-VDVAD-pNA and the signal can be detected spectrophotometrically.

## ITEM(S) SUPPLIED

Cat. #	Description	Size
RCH-002	Active Recombinant Human Caspase-2 (Lyophilized)	25 Units

## STORAGE CONDITIONS

It is shipped in blue ice. The lyophilized caspase-2 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-2 is the enzyme activity that cleaves 1 nmol of the caspase substrate VDVAD-pNA (pNA: pnitroaniline) 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:

10,000-13,000 units /mg

## PREPARATION BEFORE USE

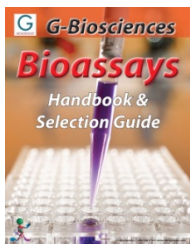
Reconstitute the supplied Caspase-2 to 1 unit per  $\mu$ l in PBS.

## APPLICATIONS AND USAGE

The active recombinant human caspase-2 was expressed in *E. coli*. The expressed caspase-2 spontaneously undergoes auto-processing to yield the subunits characteristic of the native enzyme. In combination with caspase-2 activity assays, the active recombinant caspase-2 is useful in screening caspase inhibitors, studying enzyme regulation and kinetics and determining specificity of caspase substrates. It also can be used as a positive control in caspase activity assays. We recommend using 1 unit/assay for analyzing caspase activity. For a complete caspase-2 assay protocol, please refer to our CasPASE™ -Apoptosis Assay Kit (Cat # 786-200 to 786-206).

## RELATED PRODUCTS

Download our Bioassays Handbook.



<http://info.gbiosciences.com/complete-bioassay-handbook>

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

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