

## Active Recombinant Caspase Set II

**CATALOG #:** K231-4-25

**LOT #:** \_\_\_\_\_

**PACKAGE CONTENT:**

Description	Amount	Cap Color	Part Number
Recombinant Caspase-1	25 units	Yellow	1081-25
Recombinant Caspase-2	25 units	Orange	1082-25
Recombinant Caspase-9	25 units	Blue	1089-25
Recombinant Caspase-10	25 units	Amber	1090A-25

**UNIT DEFINITION:**

One unit of the recombinant human caspase-1, -2, -9, and -10 is the enzyme activity that cleaves 1 nmol of the caspase substrate YVAD-pNA, VDAD-pNA, LEHD-pNA, and IETD-pNA, respectively, 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.

**FORM:** Lyophilized powder

**RECONSTITUTION:** Reconstituted to 0.1 - 1 unit per µl in PBS.

**STORAGE:** Store at -70°C. Stable for 1 year at -70°C

**DESCRIPTION:**

Caspases are known to play an important role in apoptosis. Caspases exist in cells as inactive pro-enzymes. Most of the pro-caspases are matured by proteolysis to yield large and small subunits. Active caspases are heterotetramers, each of which consists of two large and two small subunits.

**APPLICATIONS AND USAGE:**

Recombinant human caspases were expressed in *E. coli* and purified. Active recombinant caspases are useful for screen of caspase inhibitors, study enzyme kinetics and regulation, determine target substrate specificity, and as a positive control in caspase activity assays. We recommend using 1 unit per assay for analyzing caspase activity.

For a complete caspase activity assay protocol, please refer to BioVision's Caspase Activity Assay Kits.

**FOR RESEARCH USE ONLY! Not to be used in humans.**

**RELATED PRODUCTS:**

Apoptosis Detection Kits & Reagents

- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptosis siRNA Vectors

Cell Fractionation System

- Mitochondria/Cytosol Fractionation Kit
- Nuclear/Cytosol Fractionation Kit
- Membrane Protein Extraction Kit
- Cytosol/Particulate Rapid Separation Kit
- Mammalian Cell Extraction Kit
- FractionPREP Fractionation System

Cell Proliferation & Senescence

- Quick Cell Proliferation Assay Kit
- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
- Live/Dead Cell Staining Kit

Cell Damage & Repair

- HDAC Fluorometric & Colorimetric Assays & Drug Discovery Kits
- HAT Colorimetric Assay Kit & Reagents
- DNA Damage Quantification Kit
- Glutathione & Nitric Oxide Fluorometric & Colorimetric Assay Kits

Signal Transduction

- cAMP & cGMP Assay Kits
- Akt & JNK Activity Assay Kits
- Beta-Secretase Activity Assay Kit

Adipocyte & Lipid Transfer

- Recombinant Adiponectin, Survivin, & Leptin
- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay & Drug Discovery Kits
- Total Cholesterol Quantification Kit

Molecular Biology & Reporter Assays

- siRNA Vectors
- Cloning Insert Quick Screening Kit
- Mitochondrial & Genomic DNA Isolation Kits
- 5 Minutes DNA Ligation Kit
- 20 Minutes Gel Staining/Destaining Kit
- β-Galactosidase Staining Kit & Luciferase Reporter Assay Kit

Growth Factors and Cytokines

Monoclonal and Polyclonal Antibodies