

## Active Recombinant Mouse Caspase-8

**CATALOG #:** 1188-25 25 units  
1188-100 100 units

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

### 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°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:** Reconstitute to 1 unit per µl in PBS containing 15% glycerol.

**SPECIFIC ACTIVITY:** >4000 units/mg

**PURITY:** ≥95% by SDS-PAGE

### STORAGE CONDITIONS:

The lyophilized caspase-8 is stable for 1 year at -70°C. Following reconstitution in PBS, the enzyme should be aliquoted and immediately stored at -70°C. Avoid multiple freeze/thaw cycles as activity might decrease.

### DESCRIPTION:

Caspase-8 (also known as FLICE, MASH, Mch5) is a member of the caspase-family of cysteine proteases. Similar to other caspases, caspase-8 also exists in cells as an inactive proenzyme. During apoptosis procaspase-8 is processed at aspartate residues by self-proteolysis and/or cleavage by another caspase. The processed active form of caspase-8 consists of large and small subunits which associate to form the active enzyme. Active caspase-8 has been shown to activate caspase-3 leading to degradation of a variety of cellular target proteins during apoptosis.

The recombinant active mouse caspase-8 was expressed in *E. coli*. The active caspase-8 is routinely tested at BioVision for its ability to enzymatically cleave these two substrates Ac-IETD-pNA (Cat. #1063-200) or Ac-IETD-AFC (1062-200).

### APPLICATIONS AND USAGE:

Active caspase-8 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-8 assay protocol, please refer to BioVision's Caspase-8 Fluorometric or Colorimetric Assay Kits (Cat.#: K112 and K113).

**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