



Active Recombinant Human Caspase-8

CATALOG #: 1088-25 25 units
1088-100 100 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-nitroalanine) 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: 5000 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 human 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