

Active Recombinant Human Caspase-7

CATALOG #: 1087-25 25 units
1087-100 100 units

LOT #: _____

UNIT DEFINITION:

One unit of the recombinant caspase-7 is the enzyme activity that cleaves 1 nmol of the caspase substrate DEVD-pNA (pNA: p-nitroanaline) 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 μ l in PBS containing 15% glycerol.

SPECIFIC ACTIVITY: 25,000 units/mg

PURITY: \geq 90% by SDS-PAGE

STORAGE CONDITIONS:

The lyophilized caspase-7 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-7 (also known as Mch3, ICE-LAP3, CMH-1) is a member of the caspase-family of cysteine proteases. Similar to other caspases, caspase-7 also exists in cells as an inactive proenzyme. During apoptosis procaspase-7 is processed at aspartate residues by self-proteolysis and/or cleavage by another caspase. The processed active form of caspase-7 consists of large and small subunits which associate to form the active enzyme. Active caspase-7 has been shown involving in the proteolysis of PARP (poly ADP-ribose polymerase), an enzyme that is involved in DNA repair and genomic maintenance.

The recombinant active human caspase-7 was expressed in *E. coli*. The active caspase-7 is routinely tested at BioVision for its ability to enzymatically cleave these two substrates Ac-DEVD-pNA (Cat. #1008-200) or Ac-DEVD-AFC (1007-200).

APPLICATIONS AND USAGE:

Active caspase-7 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-7 assay protocol, please refer to BioVision's Caspase Fluorometric or Colorimetric Assay Kits (Cat.#: K105 and K106).

RELATED PRODUCTS:

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- Annexin V Kits & Bulk Reagents
- Caspase Assay Kits & Reagents
- Mitochondrial Apoptosis Kits & Reagents
- Nuclear Apoptosis Kits & Reagents
- Apoptosis Inducers and Set
- Apoptotic Cell Isolation Kit

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

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- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
- LDH-Cytotoxicity Assay Kit
- Bioluminescence Cytotoxicity Assay Kit
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- Recombinant Adiponectin, Survivin, & Leptin
- CETP Activity Assay & Drug Discovery Kits
- PLTP Activity Assay Kit
- 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
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