

Active Recombinant Human Caspase-7

CATALOG No: 1087-25 25 units
1087-100 100 units

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-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.

SOURCE: *E. coli*

FORM: Lyophilized powder with additives

RECONSTITUTION: Reconstitute to 1 unit per µl in water

SPECIFIC ACTIVITY: ≥ 25,000 units/mg

PURITY: ≥ 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. No.1008-200) or Ac-DEVD-AFC (BioVision Cat. No: 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

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