

Active Recombinant Human Caspase-4

CATALOG #: 1084-25 25 units
1084-100 100 units

LOT #: _____

UNIT DEFINATION:

One unit of the recombinant caspase-4 is the enzyme activity that cleaves 1 nmol of the caspase substrate WEHD-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 μ l in PBS containing 15% glycerol.

SPECIFIC ACTIVITY: 5000 units/mg

PURITY: \geq 95% by SDS-PAGE

STORAGE CONDITIONS:

The lyophilized caspase-4 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-4 (also know as Ich-4, ICE_{reII}, TX) is a member of the caspase-family of cysteine proteases. Similar to other caspases, caspase-4 exists in cells as an inactive proenzyme which is matured by proteolysis to yield large and small subunits. The active caspase-4 is a heterotetramer consisting of two large and two small subunits. To date the mechanism of caspase-4 activation and roles of caspase-4 in apoptosis are poorly understood.

The recombinant active human caspase-4 was expressed in *E. coli*. The active caspase-4 is routinely tested at BioVision for its ability to enzymatically cleave these two substrates Ac-WEHD-pNA (Cat. #1102-200) or Ac-WEHD-AFC (1101-200).

APPLICATIONS AND USAGE:

Active caspase-4 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-4 assay protocol, please refer to BioVision's Caspase-4 Fluorometric or Colorimetric Assay Kits (Cat.#: K126 and K127).

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

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- Senescence Detection Kit
- High Throughput Apoptosis/Cell Viability Assay Kits
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- Bioluminescence Cytotoxicity Assay Kit
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- PLTP Activity Assay Kit
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- Cloning Insert Quick Screening Kit
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