

## Active Recombinant Human Caspase-6

**CATALOG NO:** 1086-25 25 units  
1086-100 100 units

### UNIT DEFINATION:

One unit of the recombinant caspase-6 is the enzyme activity that cleaves 1 nmol of the caspase substrate VEID-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 µl in PBS containing 15% glycerol.

**SPECIFIC ACTIVITY:** 13,000 units/mg

**PURITY:** ≥95% by SDS-PAGE

### STORAGE CONDITIONS:

The lyophilized caspase-6 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-6 (also know as Mch2) is a member of the caspase-family of cysteine proteases. Similar to other caspases, caspase-6 also exists in cells as an inactive proenzyme. During apoptosis procaspase-6 is processed at aspartate residues by self-proteolysis and/or cleavage by another caspase. The processed active form of caspase-6 consists of large (18 kDa) and small (11 kDa) subunits which associate to form the active enzyme. Active caspase-6 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-6 was expressed in *E. coli* and fused with His tag. The active caspase-6 is routinely tested at BioVision for its ability to enzymatically cleave these two substrates Ac-VEID-pNA (Cat. #1070-200) or Ac-VEID-AFC (1069-200).

### APPLICATIONS AND USAGE:

Active caspase-6 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-6 assay protocol, please refer to BioVision's Caspase-6 Fluorometric or Colorimetric Assay Kits (Cat.#: K114 and K115).

### 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