

## Active Recombinant Human Caspase-9

**CATALOG NO:** 1089-25 25 units  
1089-100 100 units

### UNIT DEFINATION:

One unit of the recombinant caspase-9 is the enzyme activity that cleaves 1 nmol of the caspase substrate LEHD-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 with additives

**RECONSTITUTION:** Reconstitute to 1 unit per µl in water.

**SPECIFIC ACTIVITY:** 400 units/mg

**PURITY:** ≥90% by SDS-PAGE

### STORAGE CONDITIONS:

The lyophilized caspase-9 is stable for 1 year at -70° C. Following reconstitution in water, the enzyme should be aliquoted and immediately stored at -70° C. Avoid multiple freeze/thaw cycles as activity might decrease.

### DESCRIPTION:

Caspase-9 is a member of the caspase-family of cysteine proteases. Similar to other caspases, caspase-9 also exists in cells as an inactive proenzyme. During the initiation of apoptosis procaspase-9 is processed at aspartate residues to form active caspase-9. As one of the initiator caspases, active caspase-9 functions to trigger activation of downstream effector caspases, leading to disassembly of cell structures.

The recombinant active human caspase-9 was expressed in *E. coli*. The active caspase-9 is routinely tested at BioVision for its ability to enzymatically cleave these two substrates Ac-LEHD-pNA (Cat. No 1076-200) or Ac-LEHD-AFC (Cat. No. 1075-200).

### APPLICATIONS AND USAGE:

Active caspase-9 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-9 assay protocol, please refer to BioVision's Caspase-9 Fluorometric or Colorimetric Assay Kits (Cat. No: K118 and K119).

### RELATED PRODUCTS:

- Caspase-1, human recombinant (Cat. No. 1081-25, -100)
- Caspase-2, human recombinant (Cat. No. 1082-25, -100)
- Caspase-3, mouse recombinant (Cat. No. 1183-25, -100)
- Caspase-3 Proform, mouse recombinant (Cat. No. 1183P-5)
- Caspase-3, rat recombinant (Cat. No. 1283-25, -100)
- Caspase-4, human recombinant (Cat. No. 1084-25, -100)
- Caspase-5, human recombinant (Cat. No. 1085-25, -100)
- Caspase-6, human recombinant (Cat. No. 1086-25, -100)
- Caspase-7, human recombinant (Cat. No. 1087-25, -100)
- Caspase-8, human recombinant (Cat. No. 1088-25, -100)
- Caspase-8, mouse recombinant (Cat. No. 1188-25, -100)
- Caspase-9, human recombinant (Cat. No. 1089-25, -100)
- Caspase-9 Proform, human recombinant (Cat. No. 1089P-50)
- Caspase-10/a, human recombinant (Cat. No. 1090A-25, -100)
- Caspase-10/b, human recombinant (Cat. No. 1090B-25, -100)
- Active Human Caspases Group I (Cat. No. K241-3-25)
- Active Human Caspases Group II (Cat. No. K242-3-25)
- Active Human Caspases Group III (Cat. No. K243-3-25)
- Active Human Caspases Set I (Cat. No. K230-4-25)
- Active Human Caspases Set II (Cat. No. K231-4-25)
- Active Human Caspases Set III (Cat. No. K232-4-25)
- Active Human Caspases Set IV (Cat. No. K233-4-25)

**FOR RESEARCH USE ONLY! Not to be used on humans.**