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-*p*NA (*p*NA: *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.