Active Recombinant Human Caspase-8

CATALOG #: 1088-25 25 units 1088-100 100 units

LOT #: _____

UNIT DEFINATION:

One unit of the recombinant caspase-8 is the enzyme activity that cleaves 1 nmol of the caspase substrate IETD-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: 5000 units/mg

PURITY: >95% by SDS-PAGE

STORAGE CONDITIONS:

The lyophilized caspase-8 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-8 (also know as FLICE, MASH, Mch5) is a member of the caspase-family of cysteine proteases. Similar to other caspases, caspase-8 also exists in cells as an inactive proenzyme. During apoptosis procaspase-8 is processed at aspartate residues by self-proteolysis and/or cleavage by another caspase. The processed active form of caspase-8 consists of large and small subunits which associate to form the active enzyme. Active caspase-8 has been shown to activate caspase-3 leading to degradation of a variety of cellular target proteins during apoptosis.

The recombinant active human caspase-8 was expressed in *E. coli*. The active caspase-8 is routinely tested at BioVision for its ability to enzymatically cleave these two substrates Ac-IETD-pNA (Cat. #1063-200) or Ac-IETD-AFC (1062-200).

APPLICATIONS AND USAGE:

Active caspase-8 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-8 assay protocol, please refer to BioVision's Caspase-8 Fluorometric or Colorimetric Assay Kits (Cat.#: K112 and K113).

For research use only

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- Apoptosis Inducers and Set
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