



PRODUCT DATA SHEET

Product: Caspase-5 (human, recombinant, active)

Cat. No.: BC-122 (25 U)
BC-123 (100 U)

Description:

Caspase-5 (also known as ICE_{relIII}, TY) is a member of the caspase-family of cysteine proteases. Similar to other caspases, caspase-5 exists in cells as an inactive proenzyme which is matured by proteolysis to yield large and small subunits. To date the mechanism of caspase-5 activation and roles of caspase-5 in apoptosis are poorly understood.

The recombinant active human caspase-5 was expressed in *E. coli*. The active caspase-5 is routinely tested for its ability to enzymatically cleave these two substrates: Ac-WEHD-pNA and Ac-WEHD-AFC.

Form:

Lyophilized powder

Purity:

≥95% by SDS-PAGE

Reconstitution:

Reconstitute to 1 unit per μL in PBS containing 15% glycerol.

Specific Activity:

5000 units/mg

Unit Definition:

One unit of the recombinant caspase-5 is the enzyme activity that cleaves 1 nmol of the caspase substrate WEHD-pNA (pNA: p_{nitro}aniline) 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.

Storage:

The lyophilized caspase-5 is stable for 1 year at -70°C. Avoid multiple freeze/thaw cycles as activity might decrease. Following reconstitution in PBS, the enzyme should be aliquoted and immediately stored at -70°C.

Applications:

Active caspase-5 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.

Limitations:

For *in vitro* research use only. Not for use in diagnostics or in humans.

Warranty:

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.