PRODUCT DATA SHEET

Product: Caspase-2 Enzyme (human, recombinant)

Cat. No: **BC-118 (25 U)**
BC-119 (100 U)

Description: Caspase-2 (also known as Ich-1, Nedd-2) is a member of the interleukin-1 converting enzyme (ICE) family of cysteine proteases. Similar as other caspases, caspase-2 also exists in cells as an inactive proenzyme. During apoptosis, procaspase-2 is processed at aspartate residues by self-proteolysis and/or cleavage by upstream caspases. The processed form of caspase-2 consists of large (19 kDa) and small (12 kDa) subunits, which associate to form the active enzyme. The active recombinant human caspase-2 was expressed in *E. coli*. The expressed caspase-2 spontaneously undergoes auto-processing to yield the subunits characteristic of the native enzyme.

Origin: *E. coli*

Format: Lyophilized powder.

Reconstitution:
Reconstitute with PBS to 1 unit/µl.

Specific Activity: ~10,000 units/mg. One unit cleaves 1nmole of the caspase substrate VDVAD-pNA per hour at 37°C in a reaction solution containing 50mM HEPES, pH 7.2, 50mM NaCl, 0.1% CHAPS, 10mM EDTA, 5% glycerol and 10mM DTT.

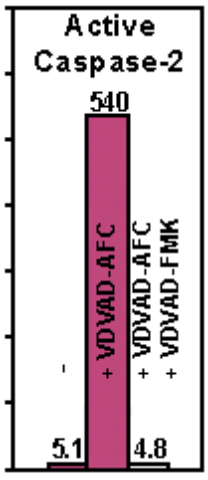

Figure: Active human caspase was expressed in E. coli and purified. The activity of recombinant caspase-2 was determined by cleaving AFC conjugates of VDVAD. The cleavage activity was effectively inhibited by the corresponding peptide inhibitor as indicated.

Storage and Stability:
Store at -80°C. Avoid freeze / thaw cycles. After reconstitution, prepare aliquots and store at -80°C.

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.