PRODUCT INFORMATION

Expression system Baculovirus

Domain 29-277aa

UniProt No. P42574

NCBI Accession No. NP_116786

Alternative Names

CASP3, CPP32, CPP32B, SCA-1, CASP-3, Apopain, Cysteine protease CPP32, CPP-32, Protein Yama, SREBP cleavage activity 1

PRODUCT SPECIFICATION

Molecular Weight

29.4 kDa (256aa)ns)

Concentration

0.5mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. 20mM HEPES buffer (pH 7.4) containing 0.1M NaCl, 1mM EDTA, 1mM DTT, 20% glycerol

Purity > 90% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Specific activity is > 5,000pmol/min/ug. One unit will liberate 1pmole of Ac-DEVD-AFC to Ac-DEVD and AFC per minute at pH7.5 at 25C.

Tag

His-Tag

Application SDS-PAGE,Enzyme Activity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.



BACKGROUND

Description

Caspase-3, also known as caspase-3 isoform a, is a member of the cysteine-aspartic acid protease (caspase) family of enzymes. This protein is most abundant in cell lines of lymphocytic origin. Also, it activates caspases 6 and 7 and the protein itself is processed and is activated by caspases 8, 9, and 10. Caspases exist as inactive proenzymes that undergo proteolytic processing at conserved aspartic residues to produce two subunits that dimerize to form the active enzyme. Members of the caspase family of proteases play central roles in coordinating the stereotypical events that occur during apoptosis. Recombinant Human Caspase-3, fused to Histag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

MSGISLDNSY KMDYPEMGLC IIINNKNFHK STGMTSRSGT DVDAANLRET FRNLKYEVRN KNDLTREEIV ELMRDVSKED HSKRSSFVCV LLSHGEEGII FGTNGPVDLK KITNFFRGDR CRSLTGKPKL FIIQACRGTE LDCGIETDSG VDDDMACHKI PVEADFLYAY STAPGYYSWR NSKDGSWFIQ SLCAMLKQYA DKLEFMHILT RVNRKVATEF ESFSFDATFH AKKQIPCIVS MLTKELYFYH <HHHHHH>

General References

Walsh JG., et al, (2008) Proc. Natl. Scad. Sci. USA 105:12815. Fernandes-Alnemri T., et al, (1994) J. Biol. Chem. 269:30761-30764.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.