Recombinant Human CASP3

Cat. No. CASP3-26768TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human Caspase-3
Species	Human
Source	E.coli
Description	This gene encodes a protein which is a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce two subunits, large and small, that dimerize to form the active enzyme. This protein cleaves and activates caspases 6, 7 and 9, and the protein itself is processed by caspases 8, 9 and 10. It is the predominant caspase involved in the cleavage of amyloid-beta 4A precursor protein, which is associated with neuronal death in Alzheimers disease. Alternative splicing of this gene results in two transcript variants that encode the same protein.
Tissue specificity	Highly expressed in lung, spleen, heart, liver and kidney. Moderate levels in brain and skeletal muscle, and low in testis. Also found in many cell lines, highest expression in cells of the immune system.
Biological activity	Specific Activity:300,000 - 400,000 units/mg.
Form	Lyophilised:Reconstitute to 0.1 µg/µl in PBS containing 15% glycerol.

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

Purity	>90% by SDS-PAGE
Storage buffer	Preservative: NoneConstituents: 15% Glycerol, PBS
Storage	Aliquot and store at -80°C. Avoid repeated freeze / thaw cycles.
Sequence Similarities	Belongs to the peptidase C14A family.

GENE INFORMATION

Gene Name	CASP3 caspase 3, apoptosis-related cysteine peptidase [Homo sapiens]
Official Symbol	CASP3
Synonyms	CASP3; caspase 3, apoptosis-related cysteine peptidase; caspase 3, apoptosis related cysteine protease; caspase-3; apopain; CPP32; CPP32B; Yama;
Gene ID	836
mRNA Refseq	NM_004346
Protein Refseq	NP_004337
MIM	600636
Uniprot ID	P42574
Chromosome Location	4q34
Pathway	Activation of DNA fragmentation factor, organism-specific biosystem; Activation of

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

	caspases through apoptosome-mediated cleavage, organism-specific biosystem; Alpha6-Beta4 Integrin Signaling Pathway, organism-specific biosystem; Alzheimers disease, organism-specific biosystem; Alzheimers disease, conserved biosystem;
Function	aspartic-type endopeptidase activity; cyclin-dependent protein kinase inhibitor activity; cysteine-type endopeptidase activity; peptidase activity; protein binding;

Tel: 1-631-559-9269 1-516-512-3133
Email: info@creative-biomart.com Fax: 1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA