
Product Data Sheet

Product Name: CASP3 Human
 Cat. No.: GP21464
 Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Caspase 3 Apoptosis-Related Cysteine Peptidase; CPP32 Caspase 3 Apoptosis-Related Cysteine Protease; Cysteine Protease CPP32; Protein Yama; CASP-3; CPP-32; SCA-1; SREBP Cleavage Activity 1; EC 3.4.22.56; CPP32B; caspase-3; PARP Cleavage Protease; procaspase3; Apopain; EC 3.4.22; CASP3.		
Amino Acid Sequence	MSGVDDDMAC HKIPVEADFL YAYSTAPGYY SWRNSKDGSW FIQSLCAMLK QYADKLEFMH ILTRVNRKVA TEFESFSFDA TFHAKKQIPC IVSMLTKELY FYH.		
Formulation	The CASP3 solution (0.5mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 0.4M Urea and 10% glycerol.		

Introduction

Caspase 3 Apoptosis-Related Cysteine Peptidase (CASP3) belongs to the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a key role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to generate 2 subunits, large and small, that dimerize to create the active enzyme. CASP3 protein cleaves and activates caspases 6, 7 and 9, and the protein itself is processed by caspases 8, 9 and 10. CASP3 is the leading caspase involved in the cleavage of amyloid-beta 4A precursor protein, which is linked with neuronal death in Alzheimer's disease. In addition, CASP3 is involved in the cleavage of huntingtin. CASP3 also cleaves and activates sterol regulatory element binding proteins (SREBPs) between the basic helix-loop-helix leucine zipper domain and the membrane attachment domain. CASP3 initiates cell adhesion in sympathetic neurons through RET cleavage.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store frozen at -20°C for longer

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Background

CASP3 Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 103 amino acids (176-277) and having a molecular mass of 12kDa. CASP3 is purified by proprietary chromatographic techniques.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA