Product Data Sheet

Product Name:	CAPN1
Cat. No.:	GP22969
Batch No.:	1

Product Data

Purity	>98%	Source	Human Erythrocytes.
Phycical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Calpain-1 catalytic subunit; EC 3.4.22.52; Calpain-1 large subunit; Calcium-activated neutral proteinase 1; Calpain mu-type; muCANP; Micromolar-calpain; Cell proliferation-inducing gene 30 protein; CANP 1; CAPN1; CANPL1; PIG30; CANP; muCL; CANP1.		
Formulation	50mM imidazole-HCl, 100mM NaCl, 5mM EGTA, 1mM DTT and 10% sucrose.		

Introduction

Calpainбпs activity is attributed to two main isoforms: ?-calpain and m-calpain, which are ubiquitously, expressed proteases implicated in cellular migration, cell cycle progression, degenerative processes and cell death. These heterodimeric enzymes are composed of distinct catalytic subunits, encoded by Capn1 (?-calpain) or Capn2 (m-calpain), and a common regulatory subunit encoded by Capn4. CAPN1 is a calcium-regulated non-lysosomal thiol-protease which catalyzes limited proteolysis of the substrates involved in cytoskeletal remodeling and signal transduction. CAPN1 is activated by micromolar concentrations of calcium and inhibited by calpastatin.

Stability

CAPN1 although stable at 10°C for 1 week, should be stored below -18°C . For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.

Background

CAPN1 consists of an 80-kDa large subunit and a 30 kDa small subunit. CAPN1 was purified by sequential chromatography through DEAE-Sepharose, A1.5m Bio-Gel, and Phenyl-Sepharose CL-4B columns.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA