Creative Enzymes®

Native Porcine Calpain 1

Cat. No. NATE-1625

Lot. No. (See product label)

Introduction

Description	Caplain 1 is a neutral calcium-dependent cysteine protease containing the EF-hand motif. The protease consists of two subunits; the larger subunit has four domains that are homologous with papain and calmodulin. The smaller subunit has one domain that shares homology with calmodulin. It is activated by micromolar levels of calcium and hence, it is also called as micro-calpain. Its activation leads to cellular protein degradation, neuronal cell degeneRation, and autoimmune demyelinating diseases such as multiple sclerosis.
Synonyms	μ-calpain; calcium-activated neutral protease I; EC 3.4.22.52

Product Information

Species	Porcine
Source	Porcine Erythrocytes
Form	Frozen
Formulation	20 mM imidazole-HCl, 5mM β-mercaptoethanol, 1 mM EDTA, 1 mM EGTA, 30% glycerol, pH 6.8.
Molecular Weight	110000
Purity	> = 95% by SDS-PAGE
Unit Definition	One unit is defined as the amount of enzyme that will hydrolyze 1 pmol Suc-LLVY-AMC in 1 minute at 25°C using the Calpain Activity Assay Kit, Fluorogenic. Note 1 caseinolytic unit=9 fluorogenic units.

Storage and Shipping Information

Storage	-70°C or lower; avoid freeze/thaw cycles
Stability	> 1 year