

CAPN1, CAPNS1

Native Human Calpain-1, Erythrocytes

Catalog No.	CRC118A CRC118B	Quantity:	100 µg 500 µg
Alternate Names:	Calpain-1 catalytic subunit, Calpain-1 small subunit,		
Description:	Calpain-1 (µ-Calpain) is a calcium activated neutral cysteine protease. It is a heterodimer of a Catalytic 80 kDa subunit and a 30 kDa subunit, which requires 50 µM Ca ²⁺ for half-maximal activity in vitro. Its participation in events such as cell division, signal transduction, and long term potentiation has been suggested. Calpains have also been proposed to play a role in various pathological processes associated with altered metabolism and altered calcium homeostasis.		
UniProt ID:	P07384 catalytic subunit P04632 small (regulatory) subunit		
Molecular Weight:	110 kDa, whole molecule 80 kDa catalytic subunit 30 kDa small (regulatory) subunit		
Source:	Human Erythrocytes.		
Formulation:	20 mM imidazole, 5 mM beta-mercaptoethanol, 1 mM EDTA , 1 mM EGTA, 30% glycerol, pH 6.8.		
Purity:	> 95% as determined by SDS-PAGE.		
Biological Activity:	One unit is defined as the amount of enzyme that will hydrolyze one pmol Suc-LLVY-AMC per minute at 25°C using the Calpain Activity Assay Kit, Fluorogenic (EMD Cat. No. QIA120)		
Specific Activity:	≥ 1,000 units/mg protein		
Storage & Stability:	Store at -80°C for up to 1 year or in working aliquots at -80°C. Avoid repeated freeze-thaw cycles.		
Infectious Disease Statement:	Prepared from whole blood shown to be non-reactive for HBsAg, anti-HCV, anti-HBc, and negative for anti-HIV 1 & 2 by FDA approved tests.		

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

