

Active Porcine Calpain 1

CATALOG #:	1138-100	100 µg
ALTERNATE NAMES:	Calpain-1 catalytic subunit, Calcium-activated neutral proteinase 1, CANP 1, Calpain mu-type, Calpain-1 large subunit, Micromolar-calpain.	
SOURCE:	Porcine Erythrocytes obtained from a USDA certified collection center.	
PURITY:	> 85% by SDS - PAGE	
MOL. WEIGHT:	110 kDa	
FORMULATION:	In 20 mM imidazole-HCl, 5 mM β-mercaptoethanol, 1 mM EDTA, 1 mM EGTA, 30% glycerol, pH 6.8.	

STORAGE CONDITIONS:

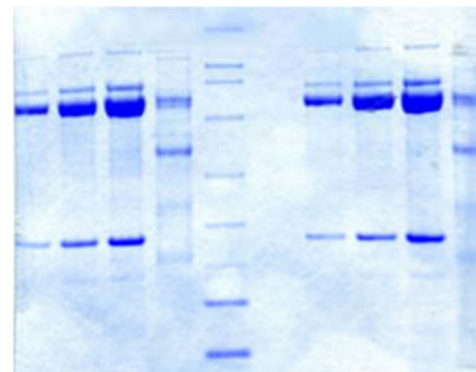
Aliquot and store at -70°C or lower. Avoid repeated freezing and thawing cycles.

DESCRIPTION:

The activity of Calpain activity is attributed to two main isoforms: n-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 (n-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.

BIOLOGICAL ACTIVITY:

≥ 1000 units/mg protein prior to freezing. 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, (K240-100).



Calpain-1, Porcine Erythrocytes

RELATED PRODUCTS:

- Active Human Calpain 1 (**Cat # 1134-100**)
- Calpain Activity Assay Kit (**Cat. No. K240-100**)
- Human Calpain 1 Inhibitor Screening Kit (**Cat. No. K244-100**)
- Calpain 1 Antibody (**Cat. No. 3189-100**)
- Calpain 1 Blocking Peptide (**Cat. No. 3189BP-50**)
- Calpain 2 Antibody (**Cat. No. 3372-100**)
- Calpain 2 Blocking Peptide (**Cat. No. 3372BP-50**)
- Calpain Inhibitor I, ALLN (**Cat. No. 1834-5, -25**)
- Calpain Inhibitor II, ALLM (**Cat. No. 1835-5, -25**)
- Calpain Inhibitor Z-LLY-FMK (**Cat. No. 1125-20C**)
- Suc-Leu-Leu-Val-Tyr-AMC (**Cat. No. 1833-5**)
- MDL 28170 (**Cat. No. 2195-10, -50**)
- PD 150,606 (**Cat. No. 1906-5, -25**)

FOR RESEARCH USE ONLY! Not to be used in humans.