

Active Human Calpain 1 (μ -Calpain)

CATALOG #: 1134-100 ,1000

AMOUNT: 100 μ g, 1 mg

DESCRIPTION:

Ca²⁺-dependent cysteine proteinase with low Ca²⁺ requirement (half maximal activation = 2 μ M). Participates in the ATP release reaction of platelets stimulated with thrombin. Involves in apoptosis activation.

SOURCE:

Prepared from packed red blood cells shown to be negative for HBsAg and for antibodies to HIV 1 & 2, HBc and HCV by FDA required tests.

FORM:

In 20 mM imidazole-HCl, 5 mM β -mercaptoethanol, 1 mM EDTA, 1 mM EGTA, 30% glycerol, pH 6.8.

MOL. WEIGHT: 110,000

PURITY: \geq 95% by SDS-PAGE

SPECIFIC ACTIVITY: \geq 1000 U/mg protein

UNIT DEFINITION:

One unit is defined as the amount of enzyme that will hydrolyze one pmol Suc-LLVY-AMC per minute at 25 °C.

STORAGE CONDITIONS:

Store at -70°C, stable for at least 1 year as supplied. Avoid freeze/thaw cycles.

REFERENCES:

1. Sorimachi, H., *et al.* (1997) *Biochem. J.* 328:721-726.
2. Croall, D.E. and MaGrody, K.S. (1994) *Biochemistry* 33:13223-13229.

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

RELATED PRODUCTS:

- Calpain Activity Assay Kit (**Cat. No. K240-100**)
- 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 Z-LLY-FMK (**Cat. No. 1125-20C**)
- Suc-Leu-Leu-Val-Tyr-AMC (**Cat. No. 1833-5**)