

Product datasheet for **AM05266PU-N**

Calpain 1 (CAPN1) Mouse Monoclonal Antibody [Clone ID: 15C10]

Product data:

Product Type:	Primary Antibodies
Clone Name:	15C10
Applications:	ELISA, IHC, IP, WB
Recommended Dilution:	ELISA: 0.5-1 µg/ml. Western blot: 0.5-1 µg/ml. Immunoprecipitation of both the native and denatured protein: 1-2 µg/ml. This Clone has been described to be suitable for Immunohistochemistry on Paraffin Sections.
Reactivity:	Bovine, Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Calpain purified from Human placenta.
Specificity:	This antibody (large subunit, p80) recognizes the 80 kD subunit of µ-Calpain as well as two smaller proteins that are presumed to be autolysis products.
Formulation:	20 mM Sodium Phosphate, pH 7.5, 150 mM Sodium Chloride, 50% Glycerol and 3 mM Sodium Azide as preservative. State: Purified State: Liquid (sterile filtered) purified IgG fraction (> 95% pure).
Concentration:	lot specific
Purification:	Standard chromatographic techniques.
Conjugation:	Unconjugated
Storage:	Store the antibody at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Gene Name:	calpain 1
Database Link:	Entrez Gene 823 Human P07384



[View online »](#)

Background:

The calpains are calcium-dependent cysteine proteases that are widely expressed in mammalian systems. Both m-calpain (calpain II) and μ -calpain (calpain I) are composed of an 80 kD subunit and a 30 kD subunit. Whereas the 30 kDa subunit is shared by both enzymes, the larger catalytic subunits are different and exhibit the distinct Ca^{++} requirements that are suggested by their names. Whereas m-calpain requires millimolar (mM) levels of calcium, μ -calpain is active at micromolar (μM) concentrations of Ca^{++} . In addition to the ubiquitously expressed m- and μ -calpains, some tissue-specific calpains have been identified. The calpains appear to serve multiple physiological roles, and ideas concerning the functions of these enzymes are in a state of rapid flux.

Synonyms:

Calpain mu-type, muCANP, CAPN1, CANPL1, PIG30, CANP1

Note:

Predicted Molecular Weight: 80 kDa