

Product datasheet for **AM05265PU-N**

Calpain (CAPN1+CAPN2) Mouse Monoclonal Antibody [Clone ID: 28F3]

Product data:

Product Type:	Primary Antibodies
Clone Name:	28F3
Applications:	ELISA, IP, WB
Recommended Dilution:	ELISA: 0.5-1 ug/ml. Western blot: 0.5-1 ug/ml. Immunoprecipitation of both the native and denatured protein: 1-2 ug/ml.
Reactivity:	Bovine, Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Calpain purified from human placenta.
Specificity:	This antibody specifically recognizes the 28-30 kD subunit of m-calpain and u-calpain. React with human and bovine calpains, but does not recognize calpains from rat or mouse.
Formulation:	0.02 M Sodium Phosphate, pH 7.5, 0.15 M 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.



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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:

CAPN2, CANPL2, CANP-2, CAPN1, CANPL1, CANP1