

CAPN2

Native Bovine Calpain 2 (m/II) large subunit

Catalog No.	CRM121A	Quantity:	2 µg
	CRM121B		5 µg
	CRM121C		10 µg
Alternate Names:	Calpain-2 catalytic subunit, EC 3.4.22.53, Calpain-2 large subunit, Calcium-activated neutral proteinase 2, CANP 2, Calpain M-type, M-calpain, Millimolar-calpain, CAPN2.		
Description:	Calpain's activity is attributed to two main isoforms: µ-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 (µ-calpain) or Capn2 (M-calpain), and a common regulatory subunit encoded by Capn4. Calpain2 (M-calpain) is believed to be membrane bound and functions at the trailing edge of the migrating cell to cleave the integrins in response to growth factor receptor signals. PKA functions to down regulate or inhibit calpain 2.		
Physical Appearance:	Sterile Filtered colorless solution.		
Gene ID:	824		
Source:	Bovine Myocardium		
Molecular Weight:	CAPN2 consists of an 80 kDa large subunit and a 30 kDa small subunit.		
Formulation:	50 mM Imidazole-HCl + 0.2 mM EDTA + 1 mM DTT and 50% glycerol, pH 7.4.		
Purity:	Greater than 90% as determined by SDS-PAGE.		
Purification:	CAPN2 was purified by sequential chromatography through DEAE-Sepharose, A 1.5 m Bio-Gel, and Phenyl-Sepharose CL-4B columns.		
Applications:	<p>This protein can be used for immunoblots, absorption experiments in immunohistochemistry, radioimmunoassay and intracellular injection. For adsorption we suggest the following procedure:</p> <p>A- Dilute 1 µl of the antiserum against m-calpain in 1 ml of the usual buffer for immunohistochemistry (final dilution 1:1,000).</p> <p>B- Add 1 µg of protein to 1 ml of the diluted antibody solution and mix well.</p> <p>C- Incubate for at least 6 hours in the cold.</p> <p>D- Apply to tissue-sections and incubate for 3 days.</p> <p>E- Complete the immunohistochemical reaction as usual (biotinylated second antibody, ABC-complex, DAB).</p> <p>As a result, the immunostaining should be strongly reduced or even completely prevented.</p>		
Storage & Stability:	<p>CAPN2 although stable at 10°C for 1 week, should be stored desiccated below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.</p>		

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