

## Basic Information

<b>Product Name</b>	Anti-Calpain 1/CAPN1 Antibody (Clone#2I10)	
<b>Gene Name</b>	CAPN1	
<b>Source</b>	Mouse	
<b>Clonality</b>	Monoclonal	
<b>Isotype</b>	IgG2a	
<b>Species Reactivity</b>	human	
<b>Tested Application</b>	WB, ICC/IF, FCM	
<b>Contents</b>	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.	
<b>Immunogen</b>	E.coli-derived human Calpain 1 recombinant protein (Position: Q396-A555). Human Calpain 1 shares 86% amino acid (aa) sequence identity with both mouse and rat Calpain 1.	
<b>Concentration</b>	500 ug/ml	
<b>Purification</b>	protein G purified.	
<b>Observed MW</b>	82 kDa	
<b>Dilution Ratios</b>	Western blot (WB):	1:500-2000
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200

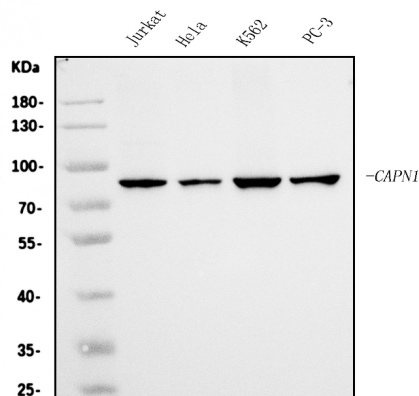
## Storage

12 months from date of receipt, -20°C as supplied.

## Background Information

CAPN1 is also known as CANP or muCL. The calpains, calcium-activated neutral proteases, are nonlysosomal, intracellular cysteine proteases. The mammalian calpains include ubiquitous, stomach-specific, and muscle-specific proteins. The ubiquitous enzymes consist of heterodimers with distinct large, catalytic subunits associated with a common small, regulatory subunit. This gene encodes the large subunit of the ubiquitous enzyme, calpain 1. Several transcript variants encoding two different isoforms have been found for this gene.

## Selected Validation Data



Western blot analysis of Calpain 1/CAPN1 using anti-Calpain 1/CAPN1 antibody (M01943-3). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

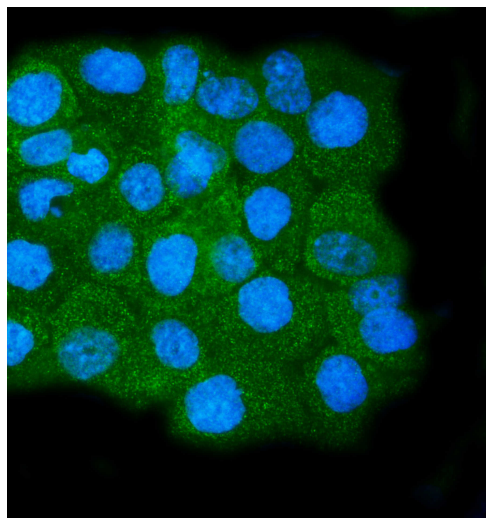
Lane 1: human Jurkat whole cell lysates,

Lane 2: human HeLa whole cell lysates,

Lane 3: human K562 whole cell lysates,

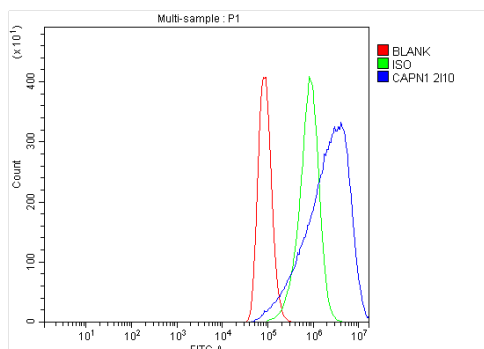
Lane 4: human PC-3 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with mouse anti-Calpain 1/CAPN1 antigen affinity purified monoclonal antibody (M01943-3) at a dilution of 1:1000 and probed with a goat anti-mouse IgG-HRP secondary antibody (Catalog # BA1050). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Calpain 1/CAPN1 at approximately 82 kDa. The expected band size for Calpain 1/CAPN1 is at 82 kDa.



IF analysis of Calpain 1/CAPN1 using anti-Calpain 1/CAPN1 antibody (M01943-3).

Calpain 1/CAPN1 was detected in an immunocytochemical section of A431 cells. The section was incubated with mouse anti-Calpain 1/CAPN1 Antibody (M01943-3) at a dilution of 1:100. DyLight488-conjugated Anti-mouse IgG Secondary Antibody (green)(Catalog#BA1126) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of A549 cells using anti-Calpain 1/CAPN1 antibody (M01943-3).

Overlay histogram showing A549 cells stained with M01943-3 (Blue line).

The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with mouse anti-Calpain 1/CAPN1 Antibody (M01943-3) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody

Product datasheet

**Anti-Calpain 1/CAPN1 Antibody  
(Clone#2I10)**

**Catalog Number: M01943-3**



antibody and ELISA experts

**BOSTER BIOLOGICAL TECHNOLOGY**

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(Green line) was mouse IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.