

## Basic Information

Product Name	Anti-Calpain 2/CAPN2 Antibody		
Gene Name	CAPN2		
Source	Rabbit		
Clonality	Polyclonal		
Isotype	IgG		
Species Reactivity	human, mouse, rat		
Tested Application	WB, ICC/IF, FCM		
Contents	500 ug/ml antibody with PBS, 0.02% NaN <sub>3</sub> , 1 mg/ml BSA and 50% glycerol.		
Immunogen	E. coli-derived human Calpain 2 recombinant protein (Position: R500-L700). Human Calpain 2 shares 93.5% and 92.5% amino acid (aa) sequence identity with mouse and rat Calpain 2, respectively.		
Concentration	500 ug/ml		
Purification	Immunogen affinity purified.		
Observed MW	80 kDa		
Dilution Ratios	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.

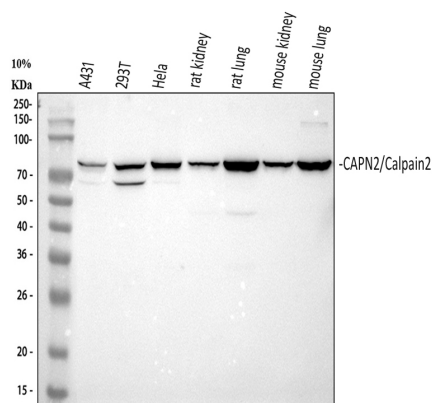
## Background Information

Calpain-2 catalytic subunit is a protein that in humans is encoded by the CAPN2 gene. 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 2. Multiple heterogeneous transcriptional start sites in the 5' UTR have been reported.

## Reference

Anti-Calpain 2/CAPN2 Antibody被引用在4文献中。

## Selected Validation Data



Western blot analysis of Calpain 2/CAPN2 using anti-Calpain 2/CAPN2 antibody (BA1575). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human A431 whole cell lysates,

Lane 2: human 293T whole cell lysates,

Lane 3: human Hela whole cell lysates,

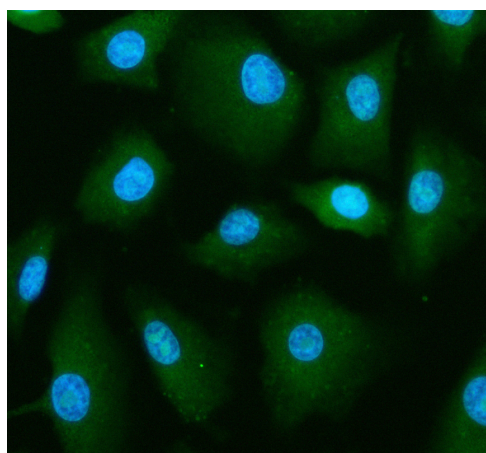
Lane 4: rat kidney tissue lysates,

Lane 5: rat lung tissue lysates,

Lane 6: mouse kidney tissue lysates,

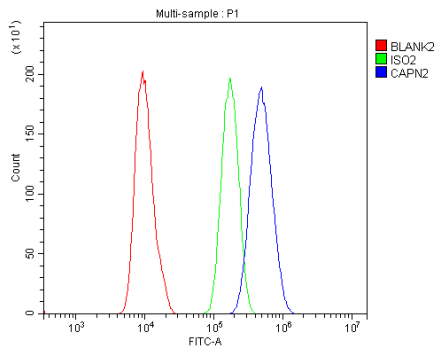
Lane 7: mouse lung tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Calpain 2/CAPN2 antigen affinity purified polyclonal antibody (BA1575) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Calpain 2/CAPN2 at approximately 80 kDa. The expected band size for Calpain 2/CAPN2 is at 80 kDa.



IF analysis of Calpain 2/CAPN2 using anti-Calpain 2/CAPN2 antibody (BA1575).

Calpain 2/CAPN2 was detected in an immunocytochemical section of A549 cells. The section was incubated with rabbit anti-Calpain 2/CAPN2 Antibody (BA1575) at a dilution of 1:100. DyLight®488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of U2OS cells using anti-Calpain 2/CAPN2 antibody (BA1575).

Overlay histogram showing U2OS cells stained with BA1575 (Blue line).

The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-Calpain 2/CAPN2 Antibody (BA1575) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit 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.