

Basic Information

Product Name	Anti-Calpain 1/CAPN1 Antibody	
Gene Name	CAPN1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	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.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	82 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

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

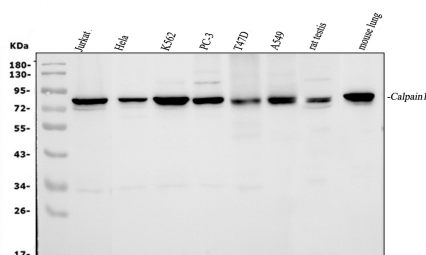
Background Information

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.

Reference

Anti-Calpain 1/CAPN1 Antibody被引用在2文献中。

Selected Validation Data



Western blot analysis of Calpain 1/CAPN1 using anti-Calpain 1/CAPN1 antibody (PB9330). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Jurkat whole cell lysates,

Lane 2: Hela whole cell lysates,

Lane 3: K562 whole cell lysates,

Lane 4: PC-3 whole cell lysates,

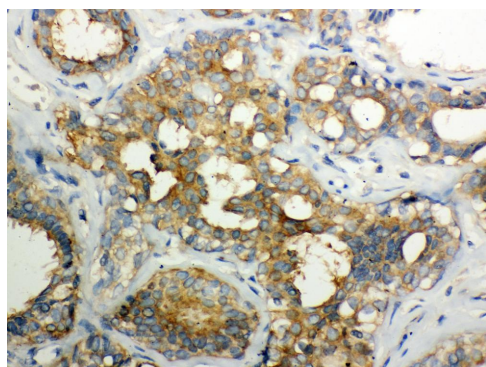
Lane 5: T47D whole cell lysates,

Lane 6: A549 whole cell lysates,

Lane 7: rat testis tissue lysates,

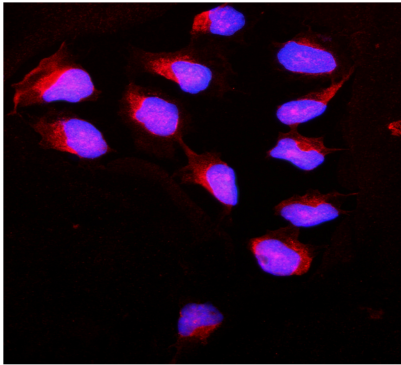
Lane 8: mouse lung tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Calpain 1/CAPN1 antigen affinity purified polyclonal antibody (PB9330) 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 1/CAPN1 at approximately 82 kDa. The expected band size for Calpain 1/CAPN1 is at 82 kDa.



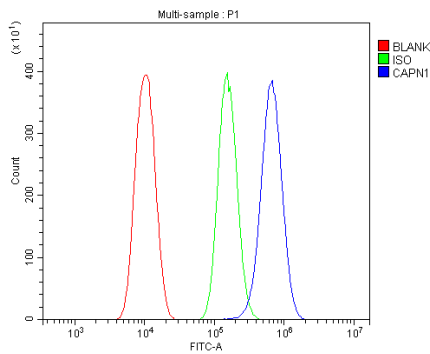
IHC analysis of Calpain 1/CAPN1 using anti-Calpain 1/CAPN1 antibody (PB9330).

Calpain 1/CAPN1 was detected in a paraffin-embedded section of human mammary cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Calpain 1/CAPN1 Antibody (PB9330) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of Calpain 1/CAPN1 using anti-Calpain 1/CAPN1 antibody (PB9330).

Calpain 1/CAPN1 was detected in an immunocytochemical section of U2OS cells. The section was incubated with rabbit anti-Calpain 1/CAPN1 Antibody (PB9330) at a dilution of 1:100. Dylight594-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1142) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow cytometry analysis of PC-3 cell(1:100) DyLight 488 conjugated goat anti-rabbit IgG(blue) was used as secondary antibody. Isotype control antibody (Green line) was rabbit IgG DyLight 488. Unlabelled sample (Red line).