

Basic Information

Product Name	Anti-Calpain 1/CAPN1 Antibody (Clone#2E3)
Gene Name	CAPN1
Source	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Species Reactivity	human
Tested Application	FCM, WB
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	protein G purified.
Observed MW	82 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Flow Cytometry (Fixed):1:50-200

Storage

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

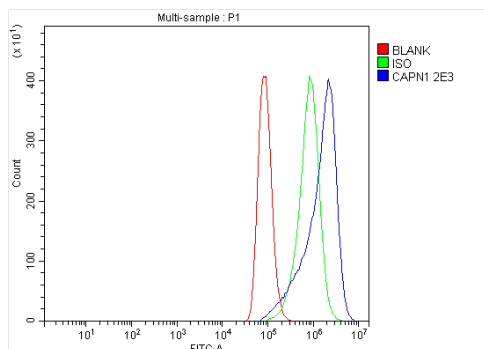
Background Information

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.

Reference

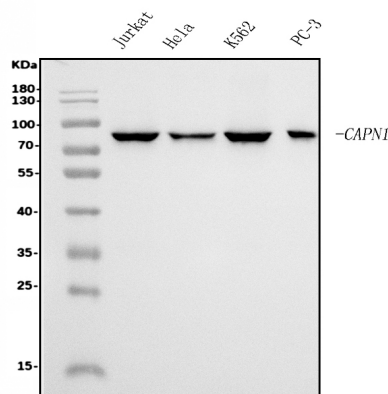
Anti-Calpain 1/CAPN1 Antibody (Clone#2E3)被引用在2文献中。

Selected Validation Data



Flow Cytometry analysis of A549 cells using anti-Calpain 1/CAPN1 antibody (M01943-4).

Overlay histogram showing A549 cells stained with M01943-4 (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 (M01943-4) 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 (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.



Western blot analysis of Calpain 1/CAPN1 using anti-Calpain 1/CAPN1 antibody (M01943-4). 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 (M01943-4) 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.