

Basic Information

Product Name	Anti-Calpain 1/CAPN1 Antibody (Clone#2E3)
Gene Name	CAPN1
Source	Mouse
Isotype	IgG2b
Species Reactivity	human
Tested Application	WB, FCM
Contents	500 ug/ml antibody with PBS , 0.02% Na ₂ S ₂ O ₃ , 1 mg 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	82KD
Dilution Ratios	Western blot(WB): 1:500-2000 Flow cytometry (FCM):1-3 µg/1x10 ⁶ cells

Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

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

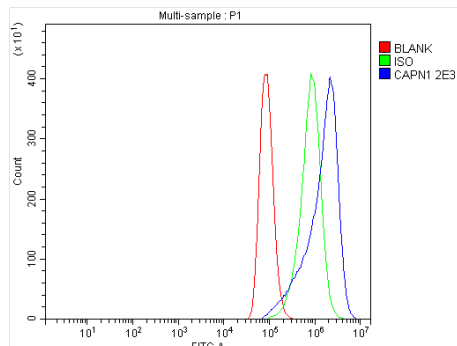


Figure 2. Flow cytometry analysis of A549 cell (1x10⁶) DyLight 488 conjugated goat anti-mouse IgG(blue) was used as secondary antibody. Isotype control antibody (Green line) was mouse IgG DyLight 488. Unlabelled sample (Red line).

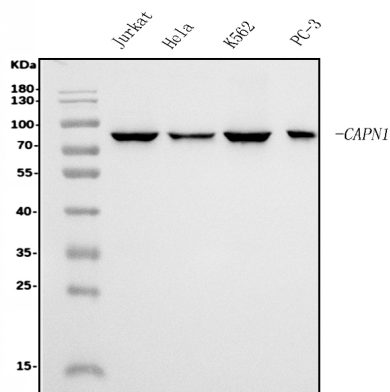


Figure 1. Western blot analysis of anti- Calpain 1 antibody (M01943-4). The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human Jurkat whole cell lysates,Lane 2: human Hela whole cell lysates,Lane 3: human K562 whole cell lysates,Lane 4: human PC-3 whole cell lysates.Use mouse anti- Calpain 1 1:1000, probed with a goat anti- mouse IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001). A specific band was detected for Calpain 1 at approximately 82KD. The expected band size for Calpain 1 is at 82KD.