

Anti-Calpain 1 antibody ab39170

[32 References](#) [1 Image](#)

Overview

Product name	Anti-Calpain 1 antibody
Description	Rabbit polyclonal to Calpain 1
Host species	Rabbit
Specificity	This antibody binds to reduced and non reduced Calpain 1. It reacts with Domain IV of Calpain 1, and detects both latent and aminoprocessed (activated) Calpain 1. It but does not cross react with the other calpain family members (Calpain 2, calpain 94, ncl 2, ncl 3, etc.).
Tested applications	Suitable for: IHC (PFA fixed), ICC/IF, WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide based on Domain IV of the large subunit of Human Calpain 1. (Peptide available as ab41300 .)
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term.
Storage buffer	Preservative: 0.05% Sodium azide Constituent: 50% Glycerol
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab39170 in the following tested applications.

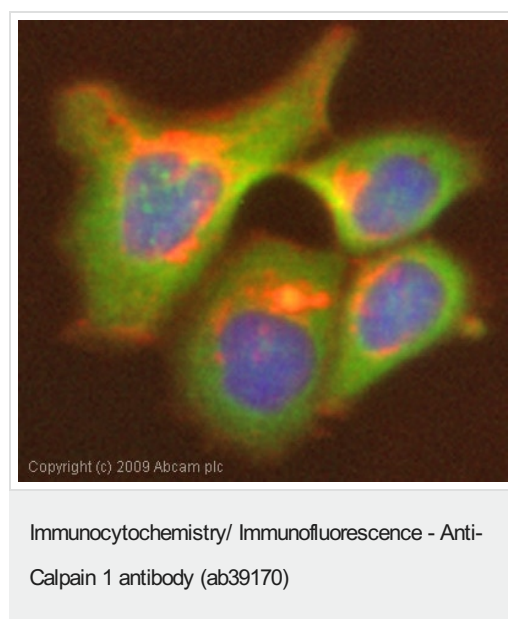
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC (PFA fixed)		Use at an assay dependent concentration.
ICC/IF		Use a concentration of 1 µg/ml.
WB		Use at an assay dependent concentration. Predicted molecular weight: 82 kDa. 1/1000 - 1/5000. Detects a band of approximately 75 kDa (predicted molecular weight: 82 kDa). Dilution optimised using Chromogenic detection.

Target

Function	Calcium-regulated non-lysosomal thiol-protease which catalyze limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction.
Tissue specificity	Ubiquitous.
Sequence similarities	Belongs to the peptidase C2 family. Contains 1 calpain catalytic domain. Contains 4 EF-hand domains.
Cellular localization	Cytoplasm. Cell membrane. Translocates to the plasma membrane upon Ca(2+) binding.

Images



ICC/IF image of ab39170 stained MCF-7 cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab39170, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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