

## ARG40279 anti-Calpain 1 antibody

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes Calpain 1
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Calpain 1
Species	Human
Immunogen	Recombinant protein corresponding to Q396-A555 of Human Calpain 1.
Conjugation	Un-conjugated
Alternate Names	EC 3.4.22.52; CANP1; Calpain-1 large subunit; Calpain-1 catalytic subunit; Calpain mu-type; muCANP; Cell proliferation-inducing gene 30 protein; Micromolar-calpain; CANP 1; CANP; muCL; CANPL1; Calcium-activated neutral proteinase 1

### Application Instructions

Application table	Application	Dilution
	FACS	1:150 - 1:500
	ICC/IF	1:200 - 1:1000
	IHC-P	0.5 - 1 µg/ml
	WB	0.1 - 0.5 µg/ml

Application Note

IHC-P: Antigen Retrieval: By heat mediation.  
\* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Observed Size

~ 80 kDa

### Properties

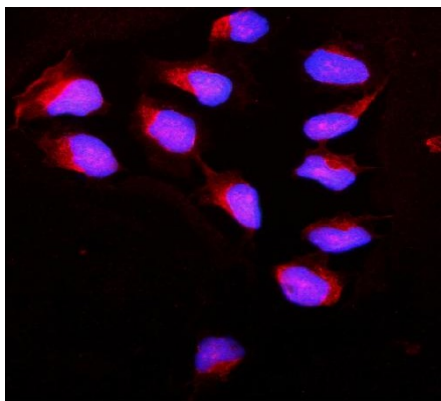
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na <sub>2</sub> HPO <sub>4</sub> , 0.9% NaCl, 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml

<b>Storage instruction</b>	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
<b>Note</b>	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

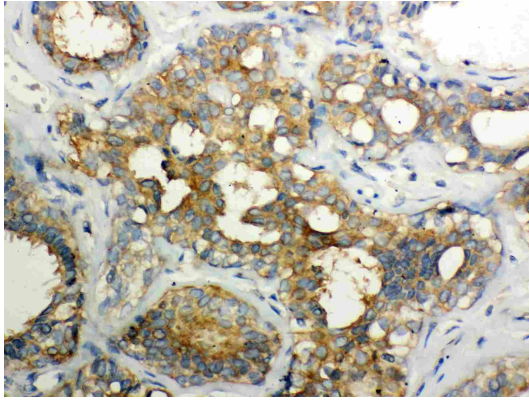
<b>Gene Symbol</b>	CAPN1
<b>Gene Full Name</b>	calpain 1, (mu/I) large subunit
<b>Background</b>	The calpains, calcium-activated neutral proteases, are nonlysosomal, intracellular cysteine proteases. The mammalian calpains include ubiquitous, stomach-specific, and muscle-specific proteins. The ubiquitous 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. [provided by RefSeq, Nov 2010]
<b>Function</b>	Calcium-regulated non-lysosomal thiol-protease which catalyze limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction. [UniProt]
<b>Calculated Mw</b>	82 kDa
<b>PTM</b>	Undergoes calcium-induced successive autoproteolytic cleavages that generate a membrane-bound 78 kDa active form and an intracellular 75 kDa active form. Calpastatin reduces with high efficiency the transition from 78 kDa to 75 kDa calpain forms. [UniProt]
<b>Cellular Localization</b>	Cytoplasm. Cell membrane. Note=Translocates to the plasma membrane upon Ca(2+) binding. In granular keratinocytes and in lower corneocytes, colocalizes with FLG and FLG2 (PubMed:21531719). [UniProt]

## Images



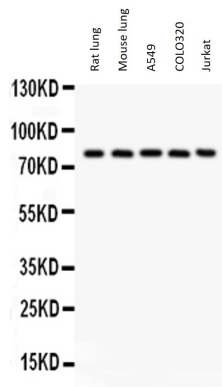
ARG40279 anti-Calpain 1 antibody ICC/IF image

Immunofluorescence: U2OS cells were blocked with 10% goat serum and then stained with ARG40279 anti-Calpain 1 antibody (red) at 2 µg/ml dilution, overnight at 4°C. DAPI (blue) for nuclear staining.



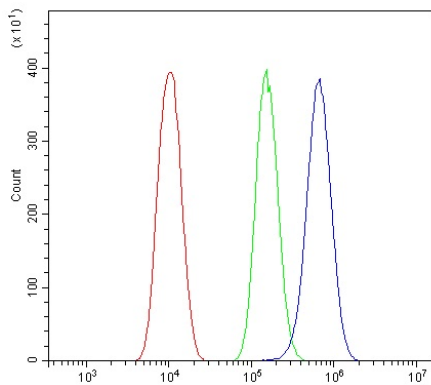
#### ARG40279 anti-Calpain 1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human mammary cancer stained with ARG40279 anti-Calpain 1 antibody.



#### ARG40279 anti-Calpain 1 antibody WB image

Western blot: 50  $\mu$ g of Rat lung, 50  $\mu$ g of Mouse lung, 40  $\mu$ g of A549, 40  $\mu$ g of COLO320 and 40  $\mu$ g of Jurkat whole cell lysates stained with ARG40279 anti-Calpain 1 antibody at 0.5  $\mu$ g/ml dilution.



#### ARG40279 anti-Calpain 1 antibody FACS image

Flow Cytometry: PC-3 cells were blocked with 10% normal goat serum and then stained with ARG40279 anti-Calpain 1 antibody (blue) at 1  $\mu$ g/ $10^6$  cells for 30 min at 20°C, followed by incubation with DyLight<sup>®</sup>488 labelled secondary antibody. Isotype control antibody (green) was rabbit IgG (1  $\mu$ g/ $10^6$  cells) used under the same conditions. Unlabelled sample (red) was also used as a control.