

**Anti-Calpain 1 Picoband Antibody**  
Catalog # ABO12021**Specification**

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**Anti-Calpain 1 Picoband Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P07384</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Calpain-1 catalytic subunit(CAPN1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Calpain 1 Picoband Antibody - Additional Information**

**Gene ID** 823

**Other Names**

Calpain-1 catalytic subunit, 3.4.22.52, Calcium-activated neutral proteinase 1, CANP 1, Calpain mu-type, Calpain-1 large subunit, Cell proliferation-inducing gene 30 protein, Micromolar-calpain, muCANP, CAPN1, CANPL1

**Calculated MW**

81890 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br>Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**Subcellular Localization**

Cytoplasm . Cell membrane . Translocates to the plasma membrane upon Ca(2+) binding. In granular keratinocytes and in lower corneocytes, colocalizes with FLG and FLG2 (PubMed:21531719). .

**Tissue Specificity**

Ubiquitous.

**Protein Name**

Calpain-1 catalytic subunit

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

**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.

#### **Purification**

Immunogen affinity purified.

#### **Cross Reactivity**

No cross reactivity with other proteins

#### **Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

#### **Sequence Similarities**

Belongs to the peptidase C2 family.

### **Anti-Calpain 1 Picoband Antibody - Protein Information**

**Name** CAPN1 ([HGNC:1476](#))

**Synonyms** CANPL1

#### **Function**

Calcium-regulated non-lysosomal thiol-protease which catalyzes limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction (PubMed:[19617626](http://www.uniprot.org/citations/19617626), PubMed:[21531719](http://www.uniprot.org/citations/21531719), PubMed:[2400579](http://www.uniprot.org/citations/2400579)). Proteolytically cleaves CTBP1 at 'Asn-375', 'Gly-387' and 'His-409' (PubMed:[23707407](http://www.uniprot.org/citations/23707407)). Cleaves and activates caspase-7 (CASP7) (PubMed:[19617626](http://www.uniprot.org/citations/19617626)).

#### **Cellular Location**

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)

#### **Tissue Location**

Ubiquitous.

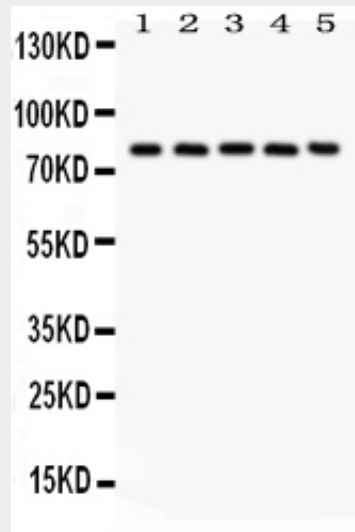
### **Anti-Calpain 1 Picoband Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

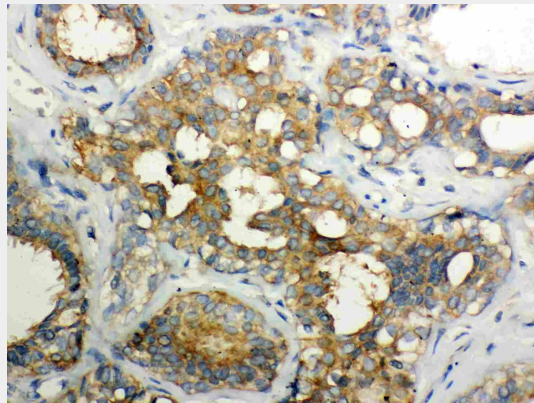
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)

- [Cell Culture](#)

### Anti-Calpain 1 Picoband Antibody - Images



Anti- Calpain1 Picoband antibody, ABO12021, Western blotting All lanes: Anti Calpain1 (ABO12021) at 0.5ug/ml Lane 1: Rat Lung Tissue Lysate at 50ug Lane 2: Mouse Lung Tissue Lysate at 50ug Lane 3: A549 Whole Cell Lysate at 40ug Lane 4: COLO320 Whole Cell Lysate at 40ug Lane 5: JURKAT Whole Cell Lysate at 40ug Predicted bind size: 82KD Observed bind size: 82KD



Anti- Calpain1 Picoband antibody, ABO12021, IHC(P) IHC(P): Human Mammary Cancer Tissue

### Anti-Calpain 1 Picoband Antibody - Background

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.