

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

Anti-Calpain 1 Picoband Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P07384
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
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

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.

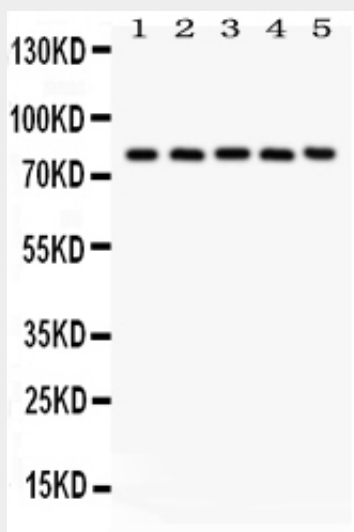
Anti-Calpain 1 Picoband Antibody - Protocols

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

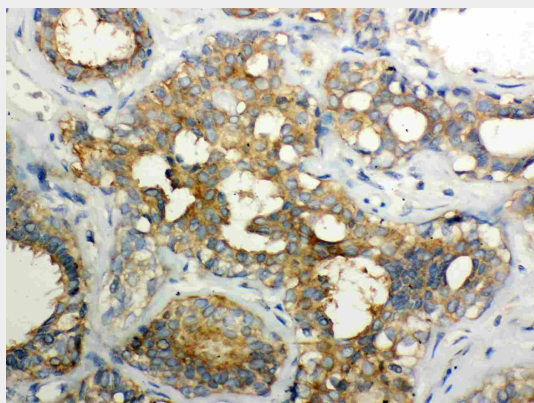
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)

- [Cell Culture](#)

Anti-Calpain 1 Picoband Antibody - Images



Anti- Calpain1 Picoband antibody, ABO12021, Western blottingAll lanes: Anti Calpain1 (ABO12021) at 0.5ug/mlLane 1: Rat Lung Tissue Lysate at 50ugLane 2: Mouse Lung Tissue Lysate at 50ugLane 3: A549 Whole Cell Lysate at 40ugLane 4: COLO320 Whole Cell Lysate at 40ugLane 5: JURKAT Whole Cell Lysate at 40ugPredicted bind size: 82KDObserved 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.