

Anti-Calpain 1 Picoband Antibody

Catalog # ABO12021

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.

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
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, By Heat Western blot, 0.1-0.5 μ g/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.
Source	Eukaryota
Protein Name	Calpain-1 catalytic subunit
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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.

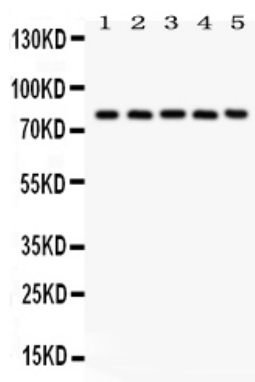
Protein Information

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 , PubMed: 21531719 , PubMed: 2400579). Proteolytically cleaves CTBP1 at 'Asn-375', 'Gly-387' and 'His-409' (PubMed: 23707407). Cleaves and activates caspase-7 (CASP7) (PubMed: 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.

Background

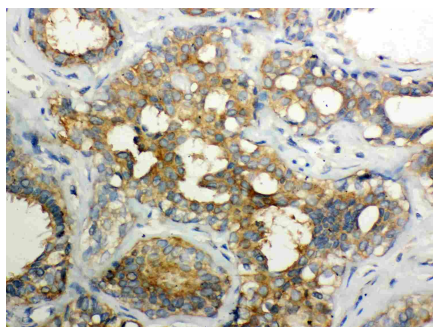
CAPN1 is also known as CANP or muCL. The calpains, calcium-activated neutral proteases, are nonlysosomal, intracellular cysteine proteases. The mammalian calpains include ubiquitous, stomach-specific, and muscle-specific proteins. The ubiquitous enzymes consist of heterodimers with distinct large, catalytic 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.

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



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