

**CAPN1 Antibody**  
**Purified Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM8430a****Specification**

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**CAPN1 Antibody - Product Information**

Application	IHC-P, FC, WB,E
Primary Accession	<a href="#">P07384</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,k
Antigen Region	1-420

**CAPN1 Antibody - Additional Information****Gene ID** 823**Other Names**

Calpain-1 catalytic subunit, 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

**Target/Specificity**

This CAPN1 antibody is generated from a mouse immunized with a KLH conjugated synthetic peptide between amino acids from the human region of human CAPN1.

**Dilution**

IHC-P~~1:25

FC~~1:25

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

CAPN1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**CAPN1 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](#), 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

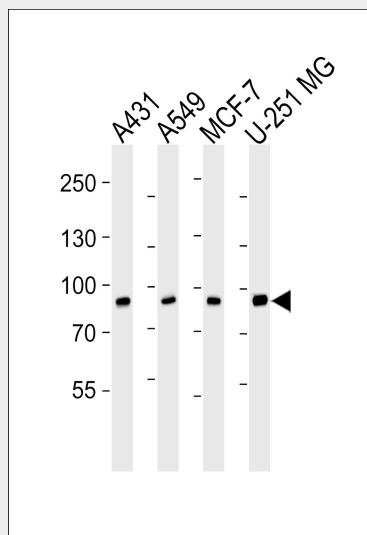
Ubiquitous.

## CAPN1 Antibody - Protocols

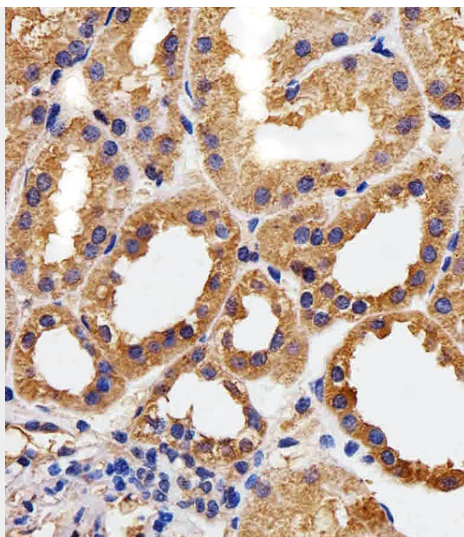
Provided below are standard protocols that you may find useful for product applications.

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

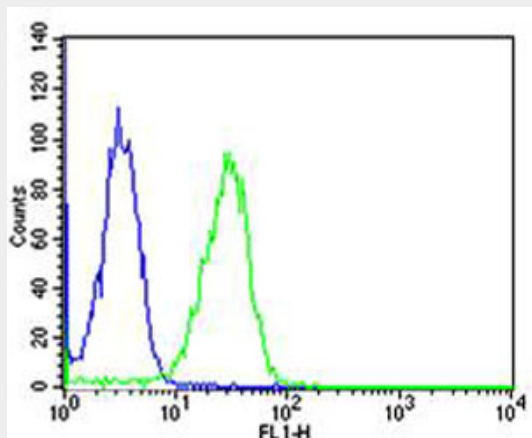
## CAPN1 Antibody - Images



Western blot analysis of lysates from A431, A549, MCF-7, U-251 MG cell line (from left to right), using CAPN1 Antibody (Cat. #AM8430a). AM8430a was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:3000 dilution was used as the secondary antibody. Lysates at 35µg per lane.



Immunohistochemical analysis of paraffin-embedded H. kidney section using CAPN1 Antibody (Cat#AM8430a). AM8430a was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.



Flow cytometric analysis of Hela cells using CAPN1 Antibody (green, Cat#AM8430a) compared to an isotype control of mouse IgG1 (blue). AM8430a was diluted at 1:25 dilution. An Alexa Fluor® 488 goat anti-mouse IgG at 1:400 dilution was used as the secondary antibody.

### **CAPN1 Antibody - Background**

Calcium-regulated non-lysosomal thiol-protease which catalyze limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction.

### **CAPN1 Antibody - References**

- Aoki K., et al. FEBS Lett. 205:313-317(1986).
- Sorimachi H., et al. Biol. Chem. Hoppe-Seyler 371:171-176(1990).
- Kim J.W., et al. Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases.
- Melloni E., et al. Biochem. Biophys. Res. Commun. 229:193-197(1996).
- Michetti M., et al. FEBS Lett. 392:11-15(1996).