

## **CAPN1** Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8430a

### **Specification**

#### **CAPN1 Antibody - Product Information**

Application IHC-P, FC, WB,E
Primary Accession P07384
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)

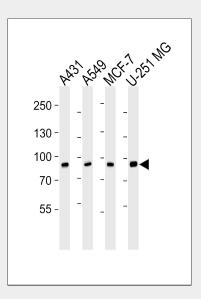
Tissue Location Ubiquitous.

## **CAPN1 Antibody - Protocols**

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

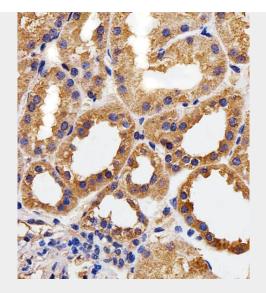
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## CAPN1 Antibody - Images

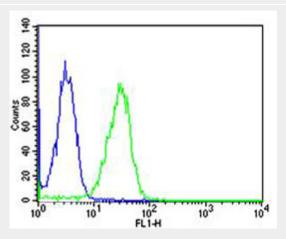


Western blot analysis of lysates from A431, A549, MCF-7, U-251 MG cell line (from left to right), using CAPN1 Antibody(Cat. #AM8430a). AM8430a was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:3000 dilution was used as the secondary antibody. Lysates at  $35\mu g$  per lane.





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).