

### **CAPN1 Antibody**

Purified Mouse Monoclonal Antibody (Mab) Catalog # AW5228

### Specification

## CAPN1 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Isotype Antigen Source IHC-P, FC, WB,E P07384 Human Mouse Monoclonal H=82 KDa IgG1,k HUMAN

### 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

**Dilution** IHC-P~~1:25 FC~~1:25 WB~~1:1000

### 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.

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:<a

href="http://www.uniprot.org/citations/19617626" target="\_blank">19617626</a>, PubMed:<a href="http://www.uniprot.org/citations/21531719" target="\_blank">21531719</a>, PubMed:<a href="http://www.uniprot.org/citations/2400579" target="\_blank">2400579</a>). Proteolytically cleaves CTBP1 at 'Asn-375', 'Gly-387' and 'His-409' (PubMed:<a

href="http://www.uniprot.org/citations/23707407" target="\_blank">23707407</a>). Cleaves and activates caspase-7 (CASP7) (PubMed:<a href="http://www.uniprot.org/citations/19617626" target="\_blank">19617626</a>).

**Cellular Location** 

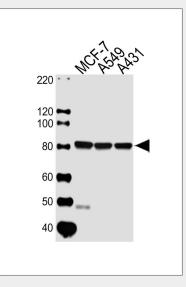
Cytoplasm. Cell membrane. Note=Translocates to the plasma membrane upon Ca(2+) binding. In granular keratinocytes and in lower corneocytes, colocalizes with FLG and FLG2 (PubMed:21531719)

Tissue Location Ubiquitous.

## **CAPN1 Antibody - Protocols**

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

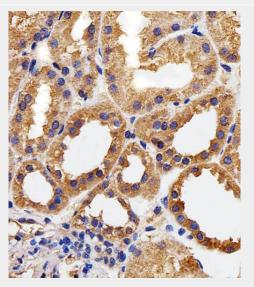
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- **CAPN1 Antibody Images**



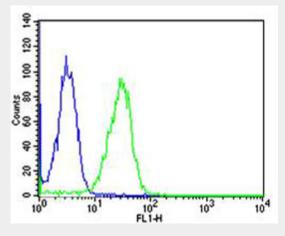
Western blot analysis of lysates from MCF-7,A549,A431 cell line (from left to right), using CAPN1



Antibody(Cat. #AW5228). AW5228 was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.



Immunohistochemical analysis of paraffin-embedded H. kidney section using CAPN1 Antibody(Cat#AW5228). AW5228 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#AW5228) compared to an isotype control of mouse IgG1(blue). AW5228 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).