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CAPN1 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AW5228

Specification

CAPN1 Antibody - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	P07384
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Calculated MW	**H=82 KDa**
Isotype	**IgG1,k**
Antigen Source	**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
WB~~1:1000
IHC-P~~1:25
FC~~1:25

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: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)

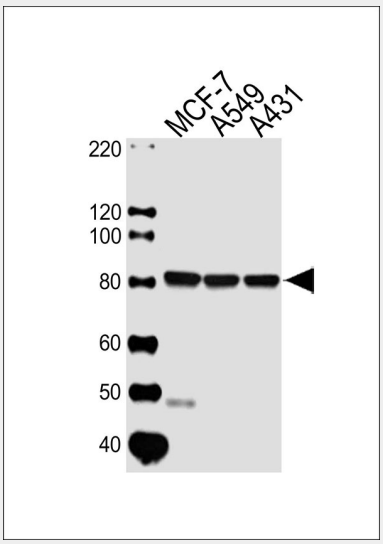
Tissue Location
Ubiquitous.

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 Cytomety
- Cell Culture

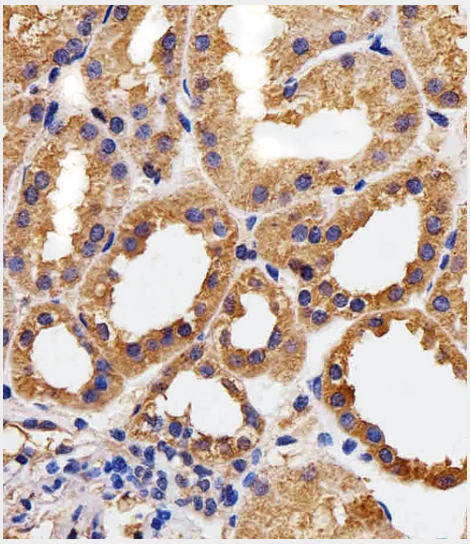
CAPN1 Antibody - Images



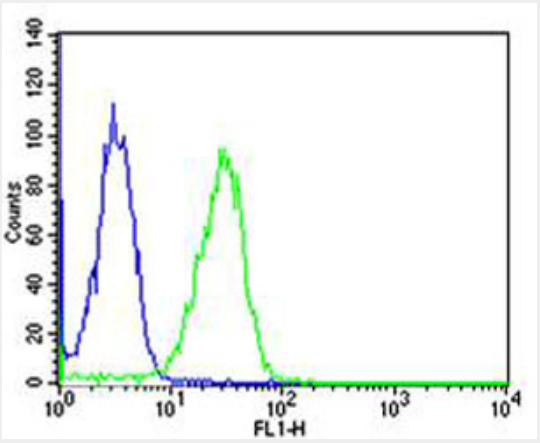
Western blot analysis of lysates from MCF-7,A549,A431 cell line (from left to right), using CAPN1

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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).