

CAPN1 Antibody

Purified Mouse Monoclonal Antibody (Mab) Catalog # AW5228

Product Information

Application	IHC-P, FC, WB
Primary Accession	<u>P07384</u>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	81890
Isotype	IgG1,k
Antigen Source	HUMAN

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~~1:100~500 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.

Protein Information

Name	CAPN1 (<u>HGNC:1476</u>)
Synonyms	CANPL1
Function	Calcium-regulated non-lysosomal thiol-protease which catalyzes limited proteolysis of substrates involved in cytoskeletal remodeling and signal

	transduction (PubMed: <u>19617626</u> , PubMed: <u>21531719</u> , PubMed: <u>2400579</u>). Proteolytically cleaves CTBP1 at 'Asn-375', 'Gly-387' and 'His-409' (PubMed: <u>23707407</u>). Cleaves and activates caspase-7 (CASP7) (PubMed: <u>19617626</u>).
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.

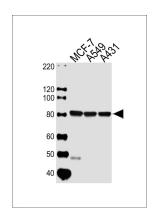
Background

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

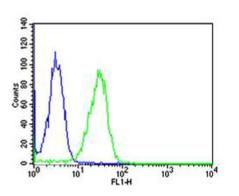
References

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).

Images

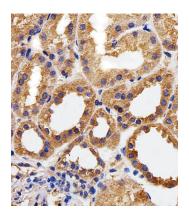


Western blot analysis of lysates from MCF-7,A549,A431 cell line (from left to right), using CAPN1 Antibody(Cat. #AW5228). AW5228 was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.



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.

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.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.