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CAPN1 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8430a

Product Information

Application	WB, FC, IHC-P, E
Primary Accession	P07384
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1,k
Clone Names	1376CT809.24.85
Calculated MW	81890
Antigen Region	1-420

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	WB~~1:1000 FC~~1:25 IHC-P~~1:100~500 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.

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.

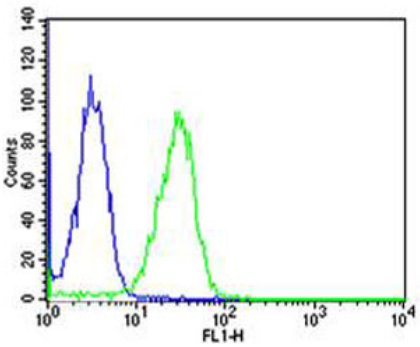
Background

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

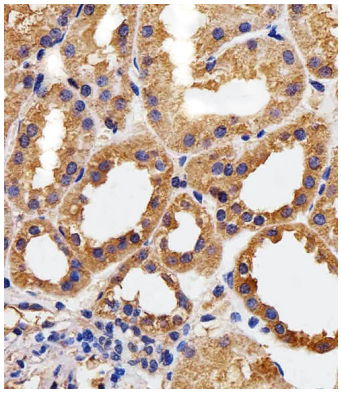
References

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

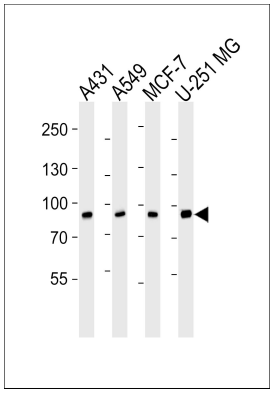


Flow cytometric analysis of Hela cells using CAPN1 Antibody(green, Cat#AM8430a) compared to an isotype control of mouse IgG1(blue). AM8430a was diluted at 1:25 dilution. An Alexa Fluor® 488 goat anti-mouse lgG at 1:400 dilution was used as the secondary antibody.



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.

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.