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Recombinant Anti-Calpain 1 Rabbit mAb

Catalog # AP95056

Product Information

Application	WB, IHC, FC, IF/IC
Primary Accession	P07384
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal
Calculated MW	81890

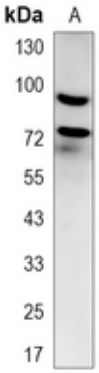
Additional Information

Gene ID	823
Other Names	CANPL1; 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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human Calpain 1 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~1:10~50 IF/IC~~N/A
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

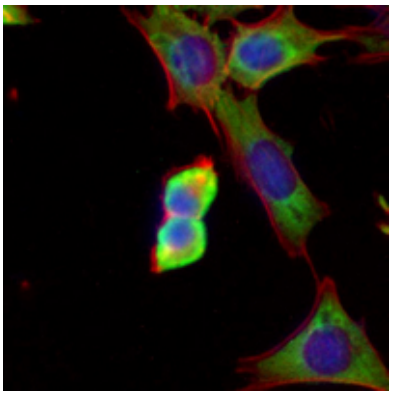
Protein Information

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.

Images



Western blot analysis of Calpain 1 expression in human fetal kidney (A) whole cell lysates. (Predicted band size: 82 kD; Observed band size: 75, 80 kD)



Immunofluorescent analysis of Calpain 1 staining in T47D cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).