



Mouse Anti-CAPN1 antibody

SLM-51590M

Product Name CAPN1**Chinese Name** 钙蛋白酶 1 单克隆抗体**Alias** Calcium activated neutral proteinase 1; Calpain1; Calpain-1; Calpain 1 catalytic subunit; Calpain large polypeptide L1; Calpain mu type; CANP 1; CANP; CANP1; CANPL1; CAPN 1; Cell proliferation inducing gene 30 protein; Cell proliferation inducing protein 30; Micromolar calpain; muCANP; muCL; Ca² activated neutral protease; Calcium activated neutral proteinase small subunit; Calcium dependent protease small subunit 1; Calcium-activated neutral proteinase 1; Calpain 1 (mu/I) large subunit; Calpain 1 catalytic subunit; Calpain 1 large subunit; Calpain Large Polypeptide L1; Calpain Large Polypeptide L1; Calpain mu type; Calpain mu-type; Calpain regulatory subunit; Calpain small subunit 1; Calpain-1 catalytic subunit; Calpain-1 large subunit; Calpain1; CAN1_HUMAN.**Research Area** Cell biology Signal transduction Apoptosis Ubiquitin**Immunogen Species** Mouse**Clonality** Monoclonal**Clone NO.** H8F3**React Species** Human**Applications** WB=1:500-2000,IHC-P=1:25-50,IHC-F=1:25-100,IF=1:100-500,Flow-Cyt=1:50-100
(Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.**Theoretical molecular weight** 78kDa**Cellular localization** cytoplasmic The cell membrane**Form** Liquid**Concentration** 1mg/ml**immunogen** KLH conjugated synthetic peptide derived from human CAPN1**Lsotype** IgG1, κ



Purification	affinity purified by Protein G
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed The calpains, calcium-activated neutral proteases, are nonlysosomal, intracellular cysteine proteases. The mammalian calpains include ubiquitous, stomach-specific, and muscle-specific proteins. The ubiquitous enzymes consist of heterodimers with distinct large, catalytic subunits associated with a common small, regulatory subunit. This gene encodes the large subunit of the ubiquitous enzyme, calpain 1. Several transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Nov 2010]
Product Detail	Function: Calcium-regulated non-lysosomal thiol-protease which catalyze limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction.
	Subunit: Forms a heterodimer with a small (regulatory) subunit (CAPNS1).
	Subcellular Location: Cytoplasm. Cell membrane. Translocates to the plasma membrane upon Ca(2+) binding.
	Tissue Specificity: Ubiquitous.
	Post-translational modifications: Undergoes calcium-induced successive autoproteolytic cleavages that generate a membrane-bound 78 kDa active form and an intracellular 75 kDa active form. Calpastatin reduces with high efficiency the transition from 78 kDa to 75 kDa calpain forms.
	Similarity: Belongs to the peptidase C2 family. Contains 1 calpain catalytic domain. Contains 4 EF-hand domains.
	SWISS: P07384
Gene ID:	

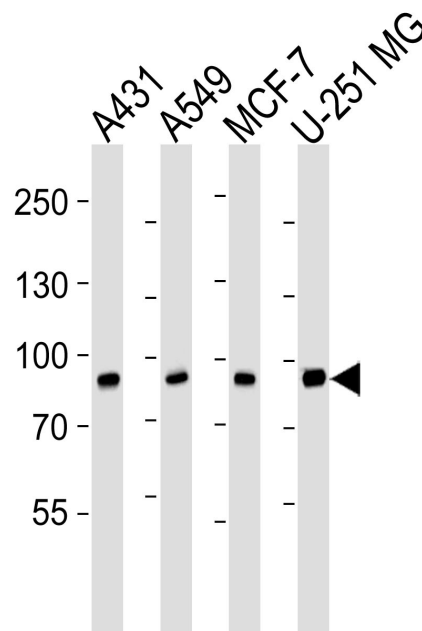
823

Database links:

[Entrez Gene: 823](#) Human

[SwissProt: P07384](#) Human

**Product
Picture**



Sample:

Lane 1: A431 cell lysates

Lane 2: A549 cell lysates

Lane 3: MCF-7 cell lysates

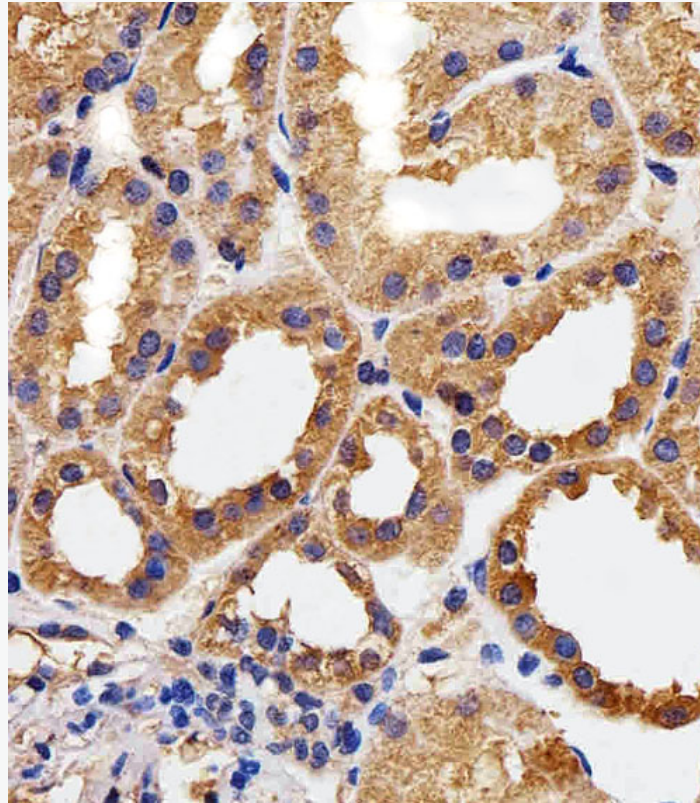
Lane 4: U-251 MG cell lysates

Primary: Anti-CAPN1 (SLM-51590M) at 1/1000 dilution

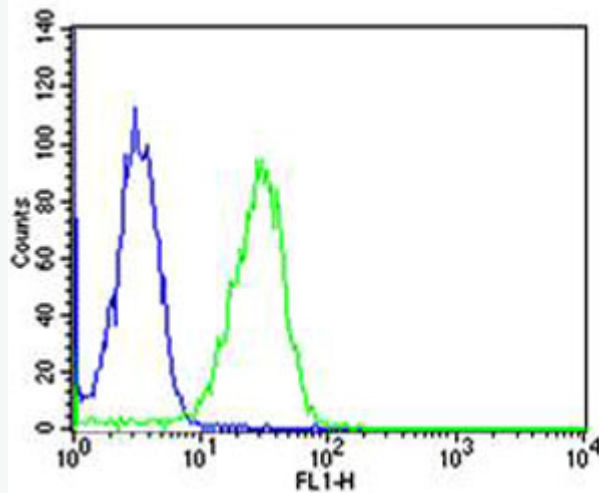
Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution

Predicted band size: 96 kD

Observed band size: 110 kD



Paraformaldehyde-fixed, paraffin embedded (Human kidney section); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CAPN1) Monoclonal Antibody, Unconjugated (SLM-51590M) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.



Blank control: HeLa.

Primary Antibody (green line): Mouse Anti-CAPN1 antibody (SLM-51590M)

Dilution: 1:25;

Isotype Control Antibody (blue line): Mouse IgG Secondary Antibody : Goat anti-mouse IgG-AF488

Dilution: 1:400 Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20°C. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature.

Acquisition of 20,000 events was performed.