

## Calpain 1 Antibody

Catalog No: #48254



Package Size: #48254-1 50ul #48254-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

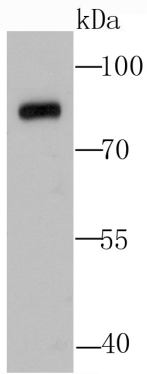
## Description

Product Name	Calpain 1 Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	ProA affinity purified
Applications	WB, ICC, IHC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	Recombinant protein
Other Names	Ca2 activated neutral protease antibody Calcium activated neutral proteinase antibody Calcium activated neutral proteinase small subunit antibody Calcium dependent protease small subunit 1 antibody Calcium dependent protease small subunit antibody Calcium-activated neutral proteinase 1 antibody Calpain 1 antibody Calpain 1 large subunit antibody Calpain 1, (mu/l) large subunit antibody Calpain mu type antibody Calpain mu-type antibody Calpain regulatory subunit antibody Calpain small subunit 1 antibody Calpain, large polypeptide L1 antibody Calpain-1 catalytic subunit antibody Calpain-1 large subunit antibody CAN1_HUMAN antibody CANP 1 antibody CANP antibody CANP small subunit antibody CANP1 antibody CANPL 1 antibody CANPL1 antibody CAPN 1 antibody CAPN1 antibody Cell proliferation inducing protein 30 antibody Cell proliferation-inducing gene 30 protein antibody Micromolar Calpain antibody Micromolar-calpain antibody Mu Calpain antibody muCANP antibody muCL antibody
Accession No.	Swiss-Prot#:P07384
Uniprot	P07384
GeneID	823;
Calculated MW	82 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

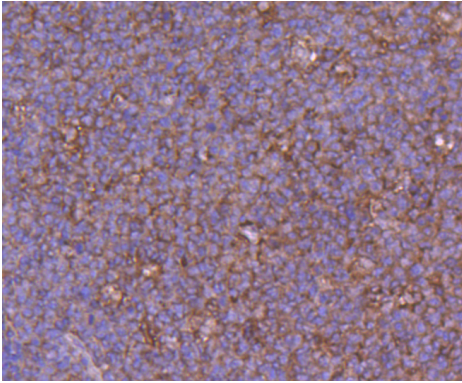
## Application Details

WB: 1:500 IHC: 1:50-1:200 ICC: 1:50-1:200

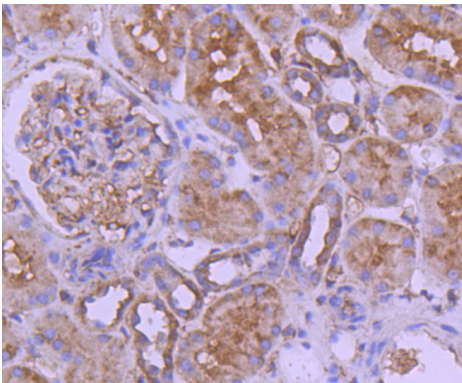
## Images



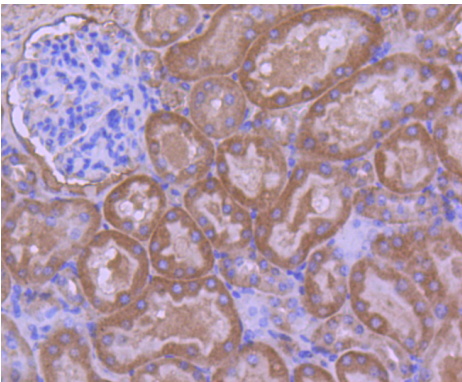
Western blot analysis of Calpain 1 on HUVEC cell lysate using anti-Calpain 1 antibody at 1/500 dilution.



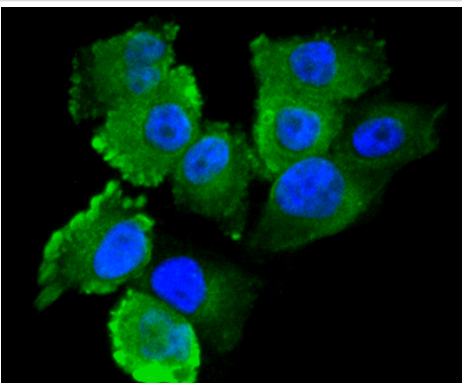
Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-Calpain 1 antibody. Counter stained with hematoxylin.



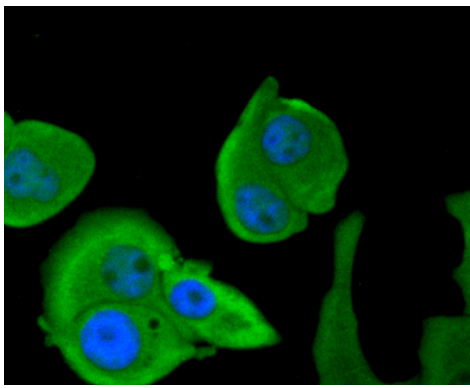
Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-Calpain 1 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded kidney tissue using anti-Calpain 1 antibody. Counter stained with hematoxylin.



ICC staining Calpain 1 in HUVEC cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining Calpain 1 in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

## Background

Calpain 1, also designated  $\gamma$ -calpain, is an intracellular calcium-dependent protease that cleaves cyto-skeletal and submembranous proteins. Calpains are nonlysosomal, calcium-activated intracellular cysteine proteases. Calpains mediate specific  $\text{Ca}^{2+}$ -dependent processes including cell fusion, mitosis and meiosis. Calpains are heterodimers of a small regulatory subunit and one of three large catalytic subunits, designated Calpain 1, Calpain 2 and Calpain p94. Calpastatin regulates Calpain by inhibiting both the proteolytic activity of Calpain and its binding to membranes. Calpastatin exists in two types, tissue type and erythrocyte type, resulting from both alternative splicing and proteolytic processing. Calpain-1 co-localizes with human leukocyte antigen-DR (HLA-DR) on activated microglia in the aging brain. Calpain influences the process of spermatogenesis and the events preceding fertilization, such as the acrosome reaction.

## References

Note: This product is for in vitro research use only