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KD-Validated Anti-Calpain 1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1193

Specification

KD-Validated Anti-Calpain 1 Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	P07384
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 82 kDa, observed, 75 kDa KDa**
Gene Name	**CAPN1**
Aliases	**CAPN1; Calpain 1; CANPL1; MuCANP; CANP; Cell Proliferation-Inducing Gene 30 Protein; Calcium-Activated Neutral Proteinase 1; Calpain 1, (Mu/I) Large Subunit; Calpain-1 Catalytic Subunit; Calpain-1 Large Subunit; Micromolar-Calpain; Calpain Mu-Type; EC 3.4.22.52; CANP; MuCL; Cell Proliferation-Inducing Protein 30; Calpain, Large Polypeptide L1; EC 3.4.22; MUCANP; CANP1; SPG76; MUCL**
Immunogen	**A synthesized peptide derived from human Calpain 1 catalytic subunit**

KD-Validated Anti-Calpain 1 Rabbit Monoclonal Antibody - Additional Information

Gene ID	**823**

Other Names
Calpain-1 catalytic subunit, 3.4.22.52, Calcium-activated neutral proteinase 1, CANP 1, Calpain mu-type, Calpain-1 large subunit, Cell proliferation-inducing gene 30 protein {ECO:0000303|Ref.3}, Micromolar-calpain, muCANP, CAPN1 (HGNC:1476), CANPL1

KD-Validated Anti-Calpain 1 Rabbit Monoclonal Antibody - 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:<a

href="http://www.uniprot.org/citations/2400579" target="_blank">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)

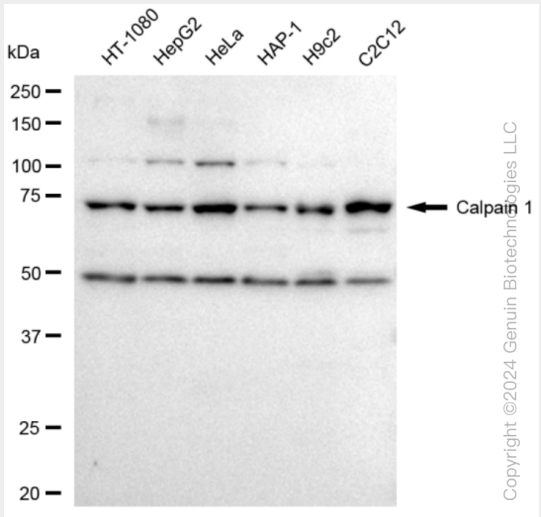
Tissue Location
Ubiquitous.

KD-Validated Anti-Calpain 1 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Calpain 1 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-Calpain 1 antibody (Cat#AGI1193). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Calpain 1 antibody (Cat#AGI1193, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

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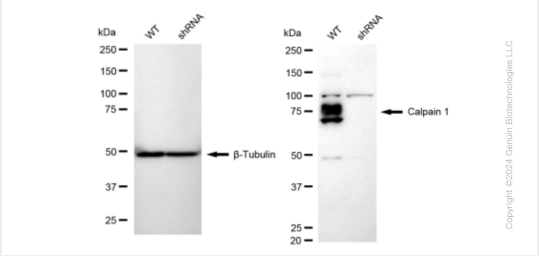
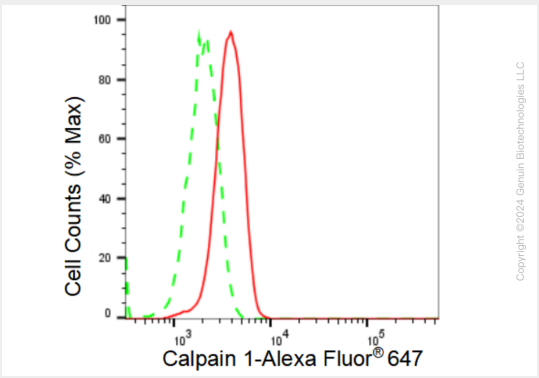
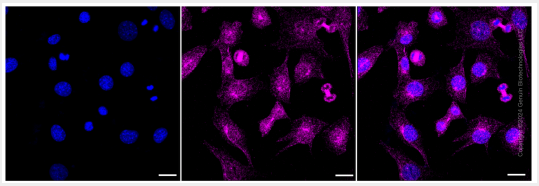


Western blotting analysis using anti-Calpain 1 antibody (Cat#AGI1193). Calpain 1 expression in wild type (WT) and Calpain 1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-Calpain 1 antibody (Cat#AGI1193, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Calpain 1 expression in C2C12 cells using Calpain 1 antibody (Cat#AGI1193, 1:2,000). Green, isotype control; red, Calpain 1.



Immunocytochemical staining of C2C12 cells with Calpain 1 antibody (Cat#AGI1193, 1:1,000). Nuclei were stained blue with DAPI; Calpain 1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.