

For Research Use Only

Calpain 2 Polyclonal antibody

Catalog Number: 11472-1-AP

Featured Product

14 Publications



Basic Information

Catalog Number: 11472-1-AP	GenBank Accession Number: BC021303	Purification Method: Antigen affinity purification
Size: 150ul, Concentration: 450 µg/ml by Nanodrop and 300 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 824	Recommended Dilutions: WB 1:2000-1:10000 IHC 1:50-1:500 IF 1:10-1:100
Source: Rabbit	Full Name: calpain 2, (m/II) large subunit	
Isotype: IgG	Calculated MW: 700 aa, 80 kDa	
Immunogen Catalog Number: AG2029	Observed MW: 72-80 kDa	

Applications

Tested Applications:

IF, IHC, IP, WB, ELISA

Cited Applications:

IF, IHC, WB

Species Specificity:

human, mouse, rat

Cited Species:

human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: A549 cells, MDA-MB-231 cells, human placenta tissue, HeLa cells, Y79 cells, C2C12 cells, mouse brain tissue, rat brain tissue, K-562 cells, PC-3 cells

IHC: human kidney tissue, human colon cancer tissue, human liver cancer tissue

IF: HepG2 cells, MDA-MB-231 cells

Background Information

Calpain 2 (Calpain-2 catalytic subunit) is also named as CANPL2, CANPml, mCANP, FLJ39928 and belongs to the peptidase C2 family. N-terminal sequencing of CAPN2 purified from human liver indicates that the N-terminal methionine is removed, resulting in a mature 699-amino acid subunit with a calculated molecular mass of 79.9 kD (PMID:2852952). It is a calcium-regulated non-lysosomal thiol-protease which catalyzes limited proteolysis of substrates involved in cytoskeletal remodelling and signal transduction. It has 2 isoforms produced by alternative splicing with the molecular weight of 80 kDa and 71 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Shuchao Wang	30240910	Ann Anat	WB, IF
Wen Tian	35598715	Pharmacol Res	IF
Takaya Kotani	33991444	Physiol Rep	WB

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

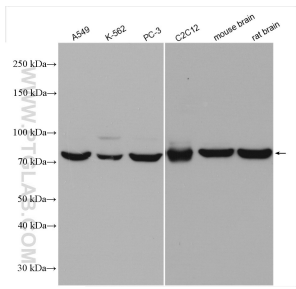
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

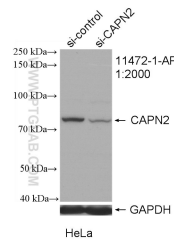
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

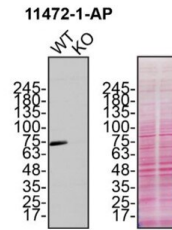
Selected Validation Data



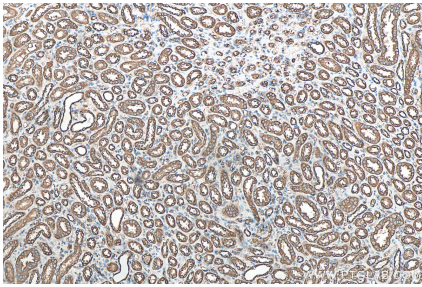
Various lysates were subjected to SDS PAGE followed by western blot with 11472-1-AP (Calpain 2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



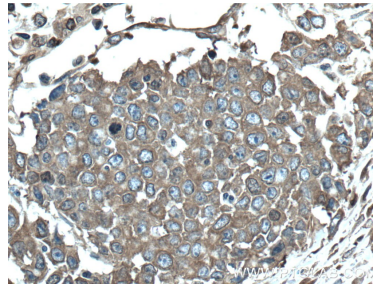
WB result of Calpain 2 antibody (11472-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Calpain 2 transfected HeLa cells.



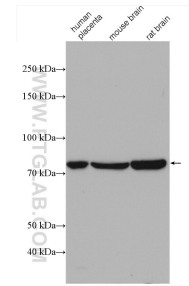
MDA-MB-231 (WT and CAPN2 KO) lysates prepared with RIPA buffer, 50 µg protein loaded. 11472-1-AP incubated at 1:500 at 4°C overnight in 5% BSA in TBST. Ponceau stained transfers shown on right. Data provided by YCharOS, an open science company with a mission to validate commercial antibodies to improve scientific reproducibility and transparency.



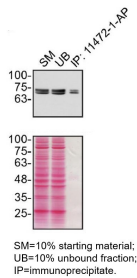
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 11472-1-AP (Calpain 2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



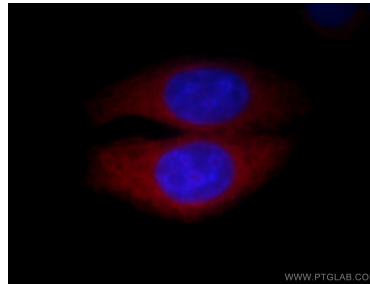
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 11472-1-AP (Calpain 2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



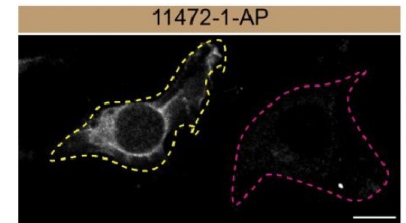
Various lysates were subjected to SDS PAGE followed by western blot with 11472-1-AP (Calpain 2 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



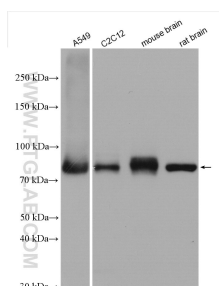
MDA-MB-231 lysates prepared and IP of CAPN2 performed using 1.0 µg of 11472-1-AP coupled to protein A- Sepharose beads. Data provided by YCharOS, an open science company with a mission to validate commercial antibodies to improve scientific reproducibility and transparency.



Immunofluorescent analysis of HepG2 cells, using CAPN2 antibody 11472-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).



MDA-MB-231 WT cells (yellow outline) and SYT1 KO cells (red outline) labelled with a green or a red fluorescence dye, respectively. Cells fixed with 4% PFA and stained with 11472-1-AP at 1:300, plus DAPI. Bars = 10 µm. Data provided by YCharOS, an open science company with a mission to validate commercial antibodies to improve scientific reproducibility and transparency.



Various lysates were subjected to SDS PAGE followed by western blot with 11472-1-AP (Calpain 2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.