

For Research Use Only

# CAPN2 Monoclonal antibody

Catalog Number: 66977-1-Ig **2 Publications**



## Basic Information

<b>Catalog Number:</b> 66977-1-Ig	<b>GenBank Accession Number:</b> BC021303	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 150ul , Concentration: 1900 µg/ml by Nanodrop and 1000 µg/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 824	<b>CloneNo.:</b> 1E1F10
<b>Source:</b> Mouse	<b>Full Name:</b> calpain 2, (m/II) large subunit	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:2000-1:8000 IF 1:400-1:1600
<b>Isotype:</b> IgG1	<b>Calculated MW:</b> 700 aa, 80 kDa	
<b>Immunogen Catalog Number:</b> AG28427	<b>Observed MW:</b> 72-80 kDa	

## Applications

### Tested Applications:

IF, IHC, WB, ELISA

### Cited Applications:

IF, WB

### Species Specificity:

Human, Mouse, Rat

### Cited Species:

human, 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, HeLa cells, HSC-T6 cells, NIH/3T3 cells, human placenta tissue, U2OS cells, LNCaP cells, HEK-293 cells, rat brain tissue, mouse brain tissue, HepG2 cells

**IHC** : human pancreas cancer tissue, human stomach cancer tissue, human colon cancer tissue, rat colon tissue

**IF** : HepG2 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 the 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 that catalyzes limited proteolysis of substrates involved in cytoskeletal remodeling 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
Jonasz Jeremiasz Weber	35482253	Cell Mol Life Sci	IF
Fengming Shen	35498131	Oxid Med Cell Longev	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

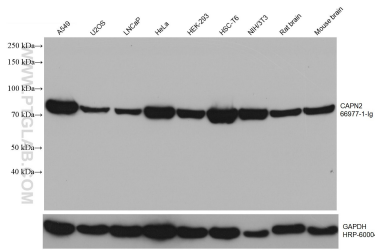
For technical support and original validation data for this product please contact:

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

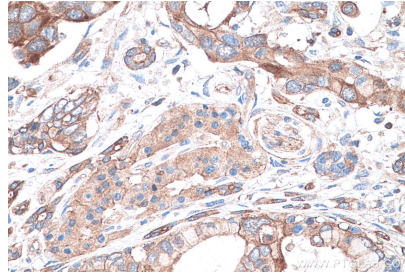
E: proteintech@ptglab.com  
W: ptglab.com

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

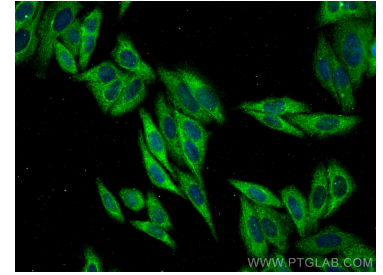
## Selected Validation Data



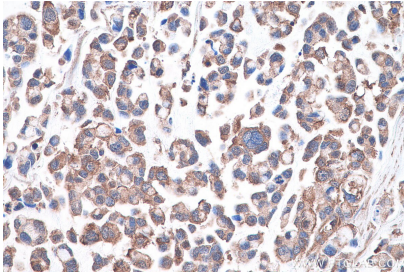
A549 cells were subjected to SDS PAGE followed by western blot with 66977-1-Ig (CAPN2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



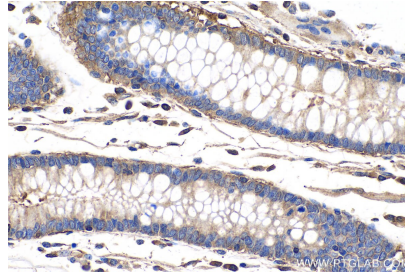
Immunohistochemical analysis of paraffin-embedded human pancreas cancer tissue slide using 66977-1-Ig (CAPN2 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



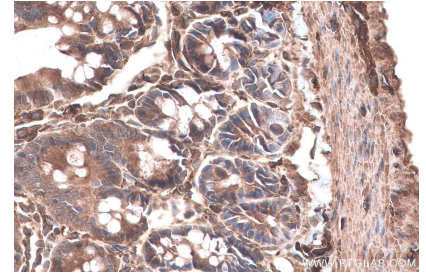
Immunofluorescent analysis of (-20°C Methanol) fixed HepG2 cells using CAPN2 antibody (66977-1-Ig, Clone: 1E1F10) at dilution of 1:800 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



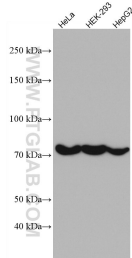
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 66977-1-Ig (CAPN2 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human stomach cancer tissue slide using 66977-1-Ig (CAPN2 antibody) at dilution of 1:8000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat small intestine tissue slide using 66977-1-Ig (CAPN2 antibody) at dilution of 1:4000 (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 66977-1-Ig (CAPN2 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.