### For Research Use Only

# CAPN2 Monoclonal antibody

Catalog Number:66977-1-lg 3 Publications



**Basic Information** 

Catalog Number: 66977-1-lg

Concentration: GeneID (NCBI): 1000 ug/ml 824

Source: UNIPROT ID: Mouse P17655

Isotype: Full Name:

IgG1 calpain 2, (m/II) large subunit
Immunogen Catalog Number: Calculated MW:

Immunogen Catalog Number:Calculated MW:AG28427700 aa, 80 kDaObserved MW:

72-80 kDa

BC021303

GenBank Accession Number:

Purification Method: Protein G purification

Protein G purification CloneNo.:

1E1F10

Recommended Dilutions: WB 1:5000-1:50000 IHC 1:2000-1:8000 IF/ICC 1:400-1:1600

## Applications

Tested Applications: WB, IHC, IF/ICC, ELISA Cited Applications:

WB. IF

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

IF/ICC: 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
Tingzhuang Yi	39434688	Int J Surg	WB,IF

## Storage

Storage

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

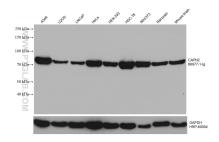
For technical support and original validation data for this product please contact:

T: 4006900926 E: Proteintech-CN@ptglab.com

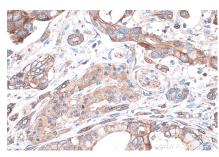
W: ptgcn.cor

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

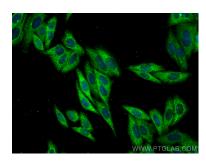
### **Selected Validation Data**



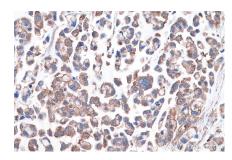
A549 cells were subjected to SDS PAGE followed by western blot with 66977-1-1g (CAPN2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



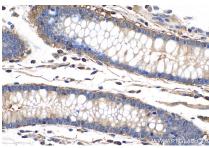
Immunohistochemical analysis of paraffinembedded human pancreas cancer tissue slide using 66977-1-1g (CAPN2 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



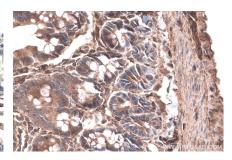
Immunofluorescent analysis of (-20°C Methanol) fixed HepG2 cells using CAPN2 antibody (66977-1-lg, Clone: 1E1F10) at dilution of 1:800 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



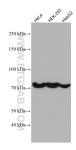
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 66977-1-lg (CAPN2 antibody) at dilution of 1:4000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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



Immunohistochemical analysis of paraffinembedded rat small intestine tissue slide using 66977-1-lg (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 66977-1-1g (CAPN2 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.