For Research Use Only

CPN1 Polyclonal antibody

Catalog Number:13385-1-AP 2 Publications

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Basic Information

Catalog Number:
13385-1-AP

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG4035

GenBank Accession Number:
BC027897

GeneID (NCBI):
1369

UNIPROT ID:
P15169

Full Name:
carboxypeptidase N, polypeptide 1

Calculated MW:
458 aa, 52 kDa

Observed MW:
40~50 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB: 1:1000-1:6000
IHC: 1:20-1:200
IF/ICC: 1:200-1:800

Applications

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

Cited Applications:
IHC

Species Specificity:
human

Cited Species:
human

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 : HepG2 cells, Raji cells, human plasma

IHC : human liver cancer tissue,

IF/ICC : COLO 320 cells, HepG2 cells

Background Information

Human carboxypeptidase N (CPN), a member of the CPN/E subfamily of "regulatory" metallo-carboxypeptidases, is an extracellular glycoprotein synthesized in the liver and secreted into the blood, where it controls the activity of vasoactive peptide hormones, growth factors and cytokines by specifically removing C-terminal basic residues. Normally, CPN circulates in blood plasma as a hetero-tetramer consisting of two 83 kDa (CPN2) domains each flanked by a 48 to 55 kDa catalytic (CPN1) domain. The C terminal region of the CPN1 subunit differs from all other family members in that it contains numerous basic residues. Proteolysis at these sites apparently happens either constitutively in the blood or during processing and secretion from the liver.

Notable Publications

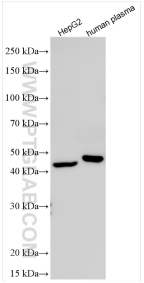
Author	Pubmed ID	Journal	Application
Ranliang Cui	34711246	Cancer Cell Int	IHC
Ranliang Cui	35431930	Front Pharmacol	IHC

Storage

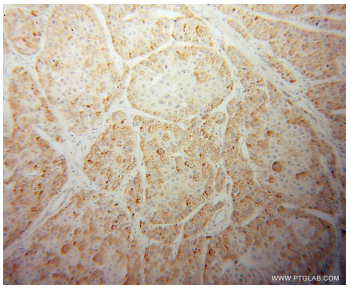
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

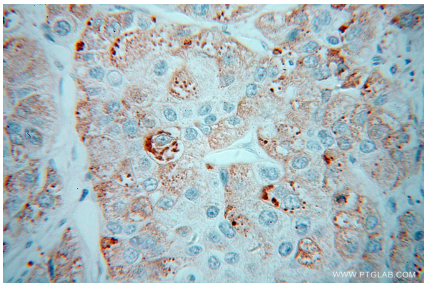
Selected Validation Data



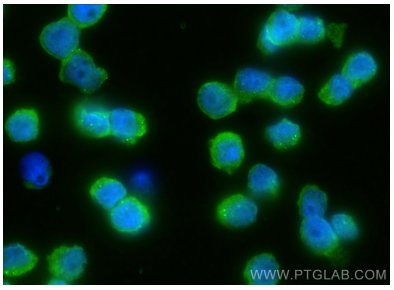
Various lysates were subjected to SDS PAGE followed by western blot with 13385-1-AP (CPN1 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



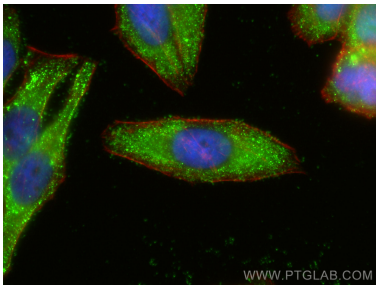
Immunohistochemical analysis of paraffin-embedded human liver cancer using 13385-1-AP (CPN1 antibody) at dilution of 1:100 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human liver cancer using 13385-1-AP (CPN1 antibody) at dilution of 1:100 (under 40x lens).



Immunofluorescent analysis of (4% PFA) fixed COLO 320 cells using CPN1 antibody (13385-1-AP) at dilution of 1:400 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002).



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using CPN1 antibody (13385-1-AP) at dilution of 1:400 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002), CL594-phalloidin (red).