

For Research Use Only

CNDP2 Polyclonal antibody

Catalog Number: 14925-1-AP

Featured Product

9 Publications



Basic Information

Catalog Number:

14925-1-AP

Size:

450 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG6684

GenBank Accession Number:

BC001375

GeneID (NCBI):

55748

UNIPROT ID:

Q96KP4

Full Name:

CNDP dipeptidase 2
(metallopeptidase M20 family)

Calculated MW:

53 kDa

Observed MW:

44-53 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:2000-1:12000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:100-1:400

IF 1:20-1:200

Applications

Tested Applications:

IF/ICC, IHC, IP, WB, ELISA

Cited Applications:

WB, IF, IHC

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, zebrafish

Positive Controls:

WB: HepG2 cells, LNCaP cells, mouse kidney tissue, rat kidney rat kidney

IP: mouse testis tissue,

IHC: human testis tissue,

IF: PC-3 cells,

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

Background Information

Carnosine dipeptidase II (CNDP2) catalyzes the peptide bond hydrolysis in dipeptides, displaying a non-redundant activity toward threonyl dipeptides. It has high dipeptidase activity toward cysteinyl glycine, an intermediate metabolite in glutathione metabolism (PubMed:19346245, PubMed:12473676). Metabolizes N-lactoyl-amino acids, both through hydrolysis to form lactic acid and amino acids, as well as through their formation by reverse proteolysis (PubMed:25964343). CNDP2 has 2 isoforms with a molecular weight of 53 and 44 kDa. The isoform 1 is ubiquitously expressed with higher levels in the kidney and liver (at protein level) and expressed in peripheral blood leukocytes (PubMed:12473676). It is also expressed in gastric mucosa and down-regulated in gastric cancer mucosal tissues (at the protein level) (PubMed:24395568). Isoform 2 is broadly expressed in fetal tissues and expressed in the adult liver and placenta. (PMID: 17121880).

Notable Publications

Author	Pubmed ID	Journal	Application
Joon T Kim	31587987	Cell Chem Biol	WB
Felix Schmöhl	31073745	Cell Mol Life Sci	WB
David C Hondius	33492460	Acta Neuropathol	IHC

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

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

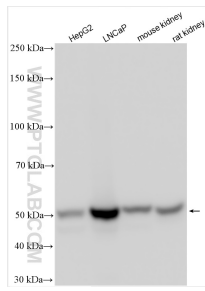
T: 4006900926

E: Proteintech-CN@ptglab.com

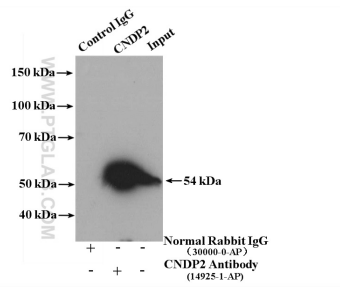
W: ptgcn.com

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

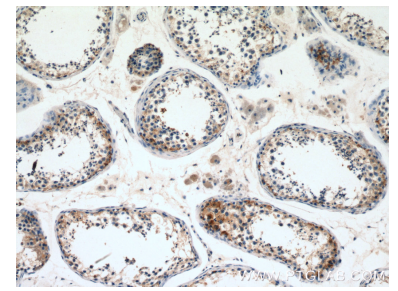
Selected Validation Data



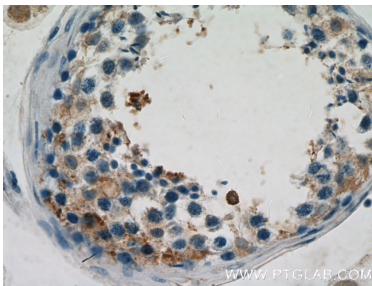
Various lysates were subjected to SDS PAGE followed by western blot with 14925-1-AP (CNDP2 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



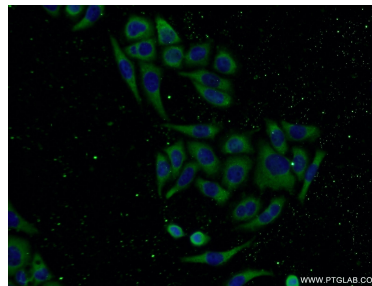
IP result of anti-CNDP2 (IP:14925-1-AP, 4ug; Detection:14925-1-AP 1:1000) with mouse testis tissue lysate 4000 ug.



Immunohistochemical analysis of paraffin-embedded human testis tissue slide using 14925-1-AP (CNDP2 Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human testis tissue slide using 14925-1-AP (CNDP2 Antibody) at dilution of 1:200 (under 40x lens).



Immunofluorescent analysis of PC-3 cells using 14925-1-AP (CNDP2 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).