

# CNDP2 Polyclonal antibody

Catalog Number: 14925-1-AP

Featured Product

11 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

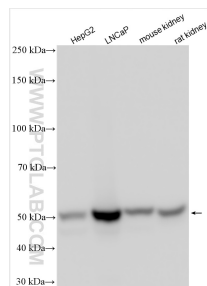
For technical support and original validation data for this product please contact:

T: 4006900926

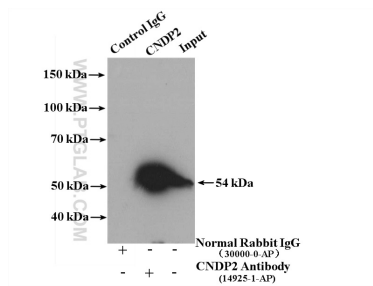
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

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

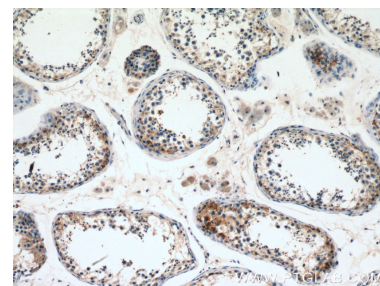
## Selected Validation Data



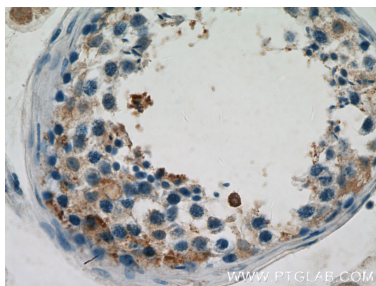
Various lysates were subjected to SDS PAGE followed by western blot with 14925-1-AP (CNDP2 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



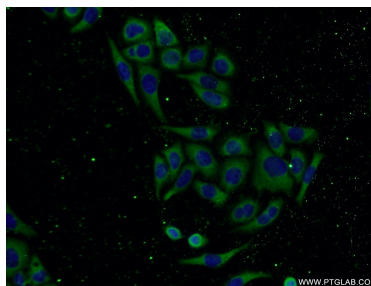
IP result of anti-CNDP2 (IP: 14925-1-AP, 4ug; Detection: 14925-1-AP 1:1000) with mouse testis tissue lysate 4000 ug.



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).