

CNDP2 Recombinant antibody

Catalog Number: 84924-7-RR

Basic Information

Catalog Number:

84924-7-RR

Concentration:

1000 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:

Protein A purification

CloneNo.:

242373E4

Recommended Dilutions:

WB 1:2000-1:10000

IHC 1:1000-1:4000

Applications

Tested Applications:

WB, IHC, ELISA

Species Specificity:

human, mouse, rat

**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 : LNCaP cells, U2OS cells, mouse kidney tissue, rat
kidney tissue

IHC : rat stomach tissue,

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).

Storage

Storage:

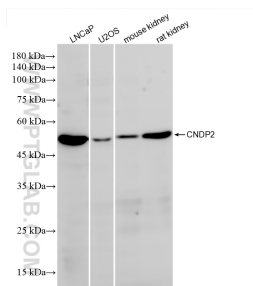
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

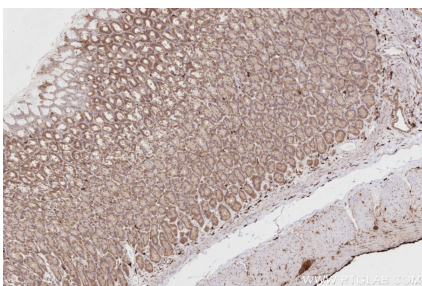
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

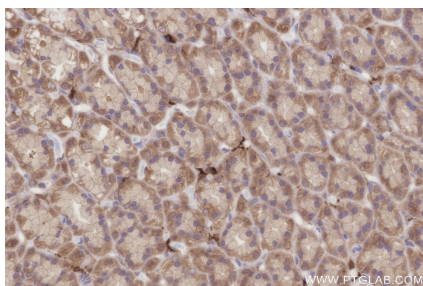
Selected Validation Data



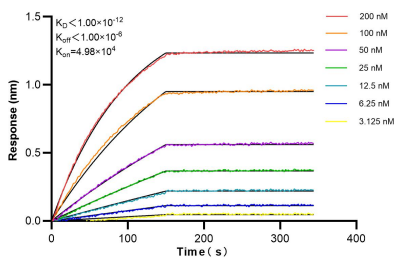
Various lysates were subjected to SDS PAGE followed by western blot with 84924-7-RR (CNDP2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded rat stomach tissue slide using 84924-7-RR (CNDP2 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat stomach tissue slide using 84924-7-RR (CNDP2 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 84924-7-RR against Human CNDP2 were performed. The affinity constant is below 1 pM.