

CNDP2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17117b

Product Information

Application WB, E Primary Accession Q96KP4

Other Accession <u>NP_060705.2</u>, <u>NP_001161971.1</u>

Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Clone Names RB37241
Calculated MW 52878
Antigen Region 348-375

Additional Information

Gene ID 55748

Other Names Cytosolic non-specific dipeptidase, CNDP dipeptidase 2, Glutamate

carboxypeptidase-like protein 1, Peptidase A, CNDP2, CN2, CPGL, PEPA

Target/SpecificityThis CNDP2 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 348-375 amino acids from the

C-terminal region of human CNDP2.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions CNDP2 Antibody (C-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

Protein Information

Name CNDP2 {ECO:0000303 | PubMed:25964343,

ECO:0000312 | HGNC:HGNC:24437}

Function Catalyzes the peptide bond hydrolysis in dipeptides, displaying a

non-redundant activity toward threonyl dipeptides (By similarity). Mediates

threonyl dipeptide catabolism in a tissue- specific way (By similarity). Has high dipeptidase activity toward cysteinylglycine, an intermediate metabolite in glutathione metabolism (PubMed:12473676, PubMed:19346245). 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). Plays a role in the regulation of cell cycle arrest and apoptosis (PubMed:17121880, PubMed:24395568).

Cellular Location

Cytoplasm

Tissue Location

[Isoform 1]: Ubiquitously expressed with higher levels in kidney and liver (at protein level). Expressed in peripheral blood leukocytes (PubMed:12473676). Expressed in gastric mucosa and down-regulated in gastric cancer mucosal tissues (at protein level) (PubMed:24395568).

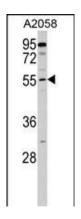
Background

CNDP2, also known as tissue carnosinase and peptidase A (EC 3.4.13.18), is a nonspecific dipeptidase rather than a selective carnosinase (Teufel et al., 2003 [PubMed 12473676]).

References

Ahmed, A.H., et al. Biochemistry 49(13):2843-2850(2010) McDonough, C.W., et al. Hum. Genet. 126(2):265-275(2009) Wanic, K., et al. Diabetes 57(9):2547-2551(2008) Wanic, K., et al. Diabetes (2008) In press: Tu, L.C., et al. Mol. Cell Proteomics 6(4):575-588(2007)

Images



CNDP2 Antibody (C-term) (Cat. #AP17117b) western blot analysis in A2058 cell line lysates (35ug/lane). This demonstrates the CNDP2 antibody detected the CNDP2 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.