

## Anti-CNDP1 Antibody (4P563)

## Product Details

Ig Type:	Rabbit IgG
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	4P563
Purification:	Protein A

## Applications

Verified Activity:	Immunofluorescence staining of Human CNDP1 in MCF7 cells. Cells were fixed with 4% PFA, permeabilized with 0.3% Triton X-100 in PBS, blocked with 10% serum, and incubated with rabbit anti-Human CNDP1 monoclonal antibody (1:60) at 37°C 1 hour. Then cells were stained with the Alexa Fluor® 488-conjugated goat Anti-rabbit IgG secondary antibody (green) and counterstained with DAPI (blue). Positive staining was localized to cytoplasm.
Application:	ELISA, ICC/IF
Recommended	ELISA: 1:5000-1:10000; ICC-IF: 1:20-1:100

## Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free.
Shipping:	Shipping with blue ice.

## Antigen Details

Immunogen:	Recombinant Protein: Human CNDP1 Protein (TMPY-00719)
Antigen Species:	Human
Synonyms:	carnosine dipeptidase 1 (metallopeptidase M20 family); AI746433; Cn1

## Research Background

CNDP1, also known as carnosine dipeptidase 1, glutamate carboxypeptidase-like protein 2 (CPGL-2) or carnosinase 1 (CN1), is a member of the M20 metalloprotease family. The CNDP1 gene contains trinucleotide (CTG) repeat length polymorphism in the coding region, which has been demonstrated to be associated with susceptibility to developing diabetic nephropathy, for carnosine protection against the adverse effects of high glucose levels on renal cells. In humans, CNDP1 is secreted from the liver into the serum. In other mammals, including rodents, CNDP1 is expressed exclusively within the kidney and lacks a signal peptide. CNDP1 protein is a secreted homodimeric dipeptidase that specifically hydrolyzes L-carnosine ( $\beta$ -alanyl-L-histidine), and is identified as human carnosinase expressed in the brain. CNDP1 has been associated with diabetic nephropathy in Europeans and European Americans, but not African-Americans. It was identified and confirmed as a risk factor, were cross-sectional and mostly in patients with type 2 diabetes. The polymorphisms of CNDP1 can be excluded as a risk factor for nephropathy in type 1 diabetes. In addition, CNDP1 is also suggested to be implicated in the actions of neuroprotection and neurotransmitting.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286    E\_mail: [info@targetmol.com](mailto:info@targetmol.com)    Address: 34 Washington Street, Wellesley Hills, MA 02481