

Datasheet for ABIN7320096
CNDP1 Protein (His tag)[Go to Product page](#)

1 Image

Overview

| | |
|-------------------------------|--|
| Quantity: | 100 µg |
| Target: | CNDP1 |
| Origin: | Mouse |
| Source: | HEK-293 Cells |
| Protein Type: | Recombinant |
| Biological Activity: | Active |
| Purification tag / Conjugate: | This CNDP1 protein is labelled with His tag. |

Product Details

| | |
|------------------------------|---|
| Purpose: | Recombinant Mouse CNDP1 Protein (His Tag)(Active) |
| Sequence: | Met 1-Tyr 492 |
| Characteristics: | A DNA sequence encoding the mouse CNDP1 (Q8BUG2) (Met 1-Tyr 492) was expressed, with an N-terminal signal peptide and a C-terminal polyhistidine tag. |
| Purity: | > 93 % as determined by SDS-PAGE |
| Endotoxin Level: | < 1.0 EU per µg of the protein as determined by the LAL method. |
| Biological Activity Comment: | Measured by its ability to cleave carnosine (β-Ala-L-His) in a two-step assay. The specific activity is > 250 pmoles/min/µg. |

Target Details

| | |
|---------|-------|
| Target: | CNDP1 |
|---------|-------|

Target Details

Alternative Name: CNDP1 ([CNDP1 Products](#))

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 (β -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 neurotransmiting.

Synonym: A1746433;Cn1

Molecular Weight: 56.5 kDa

UniProt: [Q8BUG2](#)

Application Details

Restrictions: For Research Use only

Handling

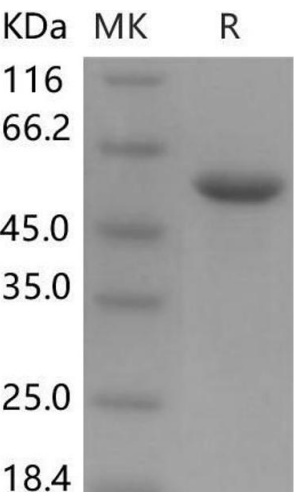
Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile PBS, pH 7.4

Storage: 4 °C, -20 °C, -80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.



Western Blotting

Image 1.