
Product Data Sheet

Product Name: CNDP1 Human, Active

Cat. No.: GP21489

Batch No.: 1

Product Data

Purity	>98%	Source	Sf9, Insect cells.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Carnosine Dipeptidase 1 (Metallopeptidase M20 Family); Glutamate Carboxypeptidase-Like Protein 2; CNDP Dipeptidase 1; Serum Carnosinase; Carnosinase 1; CPGL2; CN1; Carnosine Dipeptidase 1; EC 3.4.13.20; HsT2308.		
Amino Acid Sequence	SPSPPPALLE KVFQYIDLHQ DEFVQTLKEW VAIESDSVQP VPRFRQELFR MMAVAADTLQ RLGARVASVD MGPOQLPDGQ SLPIPPVILA ELGSDPTKGT VCFYGHLDVQ PADRGDGLWT DPYVLTEVDG KLYGRGATDN KGPVLAWINA VSAFRALEQD LPVNIKFIE GMEEAGSVAL EELVEKEKDR FFSGVYIYI SDNLWISQRK PAITYGTRGN SYFMVEVKCR DQDFHSGTGF GILHEPMADL VALLGSLVDS SGHILVPGIY DEVVPLTEEE INTYKAIHLD LEEYRNSSRV EKFLFDTKEE ILMHLWRYPY LSIHGIEGAF DEPGTKVIP GRVIGKFSIR LVPHMNVSAV EKQVTRHLED VFSKRNSSNK MVVSMTLGLH PWIANIDDTQ YLAAKRAIRT VFGTEPDMIR DGSTIPIAKM FQEIVHKSIV LIPLGAVDDG EHSQNEKINR WNYIEGTKLF AAFLEMAQL HLEHHHHHH.		
Formulation	CNDP1 protein solution (0.25mg/ml) contains Phosphate Buffered Saline (pH 7.4) and 10% glycerol.		

Introduction

CNDP Dipeptidase 1, also known as CNDP1 is a member of the peptidase M20A family. CNDP1 Mannheim which is the shortest allelic form has been more common in the absence of nephropathy in addition to being associated with lower serum carnosinase levels. Furthermore, Carnosine inhibited the increased production of fibronectin as well as collagen type VI in podocytes and the increased production of TGF-beta in mesangial cells. Diabetic patients with the CNDP1 Mannheim variant are less at risk for nephropathy. In addition, on renal cells carnosine protects against the adverse effects of

Caution: Product has not been fully validated for medical applications. For research use only.

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high glucose levels.

Biological Activity

Specific activity is >3,000 pmol/min/ug, and as measured by the hydrolysis of carnosine per minute at pH6.8 at 25°C .

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Background

CNDP1 Human Recombinant produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain containing 489 amino acids (27-507 a.a.) and having a molecular mass of 54.9kDa (Migrates at 50-70kDa on SDS-PAGE under reducing conditions). CNDP1 is expressed with a 8 amino acid His tag at C-Terminus and purified by proprietary chromatographic techniques.

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