

**Beta-Ala-His dipeptidase, 27-507aa, Human, His tag, Insect cell**

**Cat.NO.: TP01325**

3th Edition

**Synonyms:**CNDP1, CNDP dipeptidase 1, Carnosine dipeptidase 1, Glutamate carboxypeptidase-like protein 2, CN1, CPGL2, HST2308

**Description:**CNDP1, also known as beta-Ala-His dipeptidase, belongs to the peptidase M20A family. The shortest allelic form (CNDP1 Mannheim) was more common in the absence of nephropathy and was associated with lower serum carnosinase levels. Carnosine inhibited the increased production of fibronectin and collagen type VI in podocytes and the increased production of TGF-beta in mesangial cells. Diabetic patients with the CNDP1 Mannheim variant are less susceptible for nephropathy. Carnosine protects against the adverse effects of high glucose levels on renal cells. Recombinant human CNDP1, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

**Form:**Liquid. In Phosphate Buffered Saline (pH 7.4) containing 10% glycerol.

**Molecular Weight:**54.9kDa (489aa) 50-70KDa (SDS-PAGE under reducing conditions.)

**Sequences:**

SPSPPPALLEKVFQYIDLHQDEFVQTLKEWVAIESDSVQPVPRFRQELFRMMAVAADTLQRLGARVASVDMGPQQ  
LPDGQSLPIPPVILAEELGSDPTKGTVCIFYGHLDVQPADRGDGLWLTDPYVLTEVDGKLYGRGATDNKGPVLAWINAV  
SAFRALEQDLVPNIKFIIEGMEEAGSVALEELVEKEKDRFFSGVDYIVISDNLWISQRKPAITYGTRGNSYFMVEVKC  
RDQDFHSGTFFGGILHEPMADLVALLGSLVDSSGHILVPGIYDEVVPLTEEEINTYKAIHLDL E EYRNSSRVEKFLFDTK  
EEILMHLWRYP SLSIHGIEGAFDEPGTKTVIPGRVIGKFSIRLVPHMNVSAVEKQVTRHLEDVFSKRNSSNKMVSM  
TLGLHPWIANIDDTQYLAAKRAIRTVFGTEPDMIRDGSTIPIAKMFQEIVHKS VVLIPLGAVDDGEHSQNEKINRWNYI  
EGTKLFAAFFLEMAQLHLEHHHHHHH

**Purity:**> 95% by HPLC

**Concentration:**0.25mg/ml (determined by Absorbance at 280nm)

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.