TZYBIOTECH

CNDP1, 27-507aa, Human, His-tag, Baculovirus (Bioactivity Validated)

Cat.NO.: TP01660

3th Edition

Synonyms: Beta-Ala-His dipeptidase, 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
LPDGQSLPIPPVILAELGSDPTKGTVCFYGHLDVQPADRGDGWLTDPYVLTEVDGKLYGRGATDNKGPVLAWINAV
SAFRALEQDLPVNIKFIIEGMEEAGSVALEELVEKEKDRFFSGVDYIVISDNLWISQRKPAITYGTRGNSYFMVEVKC
RDQDFHSGTFGGILHEPMADLVALLGSLVDSSGHILVPGIYDEVVPLTEEEINTYKAIHLDLEEYRNSSRVEKFLFDTK
EEILMHLWRYPSLSIHGIEGAFDEPGTKTVIPGRVIGKFSIRLVPHMNVSAVEKQVTRHLEDVFSKRNSSNKMVVSM
TLGLHPWIANIDDTQYLAAKRAIRTVFGTEPDMIRDGSTIPIAKMFQEIVHKSVVLIPLGAVDDGEHSQNEKINRWNYI
EGTKLFAAFFLEMAQLHLEHHHHHH

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.