



Recombinant Protein Technical Manual

Recombinant Mouse CNDP2/CPGL/PEPA Protein (His Tag)(Active) RPES3480

Product Data:

Product SKU: RPES3480

Size: 20µg

Species: Mouse

Expression host: Baculovirus-Insect Cells

Uniprot: NP_075638.2

Protein Information:

Molecular Mass: 54 kDa

AP Molecular Mass:

Tag: C-His

Bio-activity: Measured by its ability to cleave carnosine (β -Ala-His) in a two step assay (mouse CNDP2 concentration 10 µg/ml). The specific activity is >40 pmoles/min/µg.

Purity: > 97 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Storage: 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.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 50mM Tris, 100mM NaCl, 0.5mM PMSF, 10% glycerol, pH 8.5

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

Application:

Synonyms: CNDP2;CNDP dipeptidase 2;Cytosolic non-specific dipeptidase;Glutamate carboxypeptidase-like protein 1;Dip-2;Pep;Pep1

Immunogen Information:

Sequence: Met 1-Asn 475

Background:

Cytosolic non-specific dipeptidase, also known as CNDP dipeptidase 2, Glutamate carboxypeptidase-like protein 1, Peptidase A, CNDP2 and CN2, is a cytoplasm protein which belongs to the peptidase M20A family. CNDP2 / CPGL is a cytosolic enzyme that can hydrolyze carnosine to yield L-histidine and beta-alanine. CNDP2 / CPGL hydrolyzes a variety of dipeptides including L-carnosine but has a strong preference for Cys-Gly. It may play a role as tumor suppressor in hepatocellular carcinoma (HCC) cells. Isoform 1 of CNDP2 / CPGL is ubiquitously expressed with higher levels in kidney and liver (at protein level). Isoform 2 of CNDP2 / CPGL is expressed in fetal tissues, it is only expressed in adult liver and placental tissues. CNDP2 / CPGL is highly expressed in the histaminergic neurons in the tuberomammillary nucleus, implying that it may supply histidine to histaminergic neurons for histamine synthesis.