Recombinant CBPN protein (His tag)

Catalog Number	546781
Synonyms	CPN; Anaphylatoxin inactivator; Arginine carboxypeptidase; Carboxypeptidase N polypeptide 1; Carboxypeptidase N small subunit; Kininase-1; Lysine carboxypeptidase; Plasma carboxypeptidase B; Serum carboxypeptidase N; SCPN
Species	Human
Expression System	E. coli
Accession	P15169
Molecular Weight	Predictes a molecular mass of 47.29 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 47 kDa band.

Product Information

Sequence Region	21-420
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 21-420 aa (P15169) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Carboxypeptidase N catalytic chain (CPN) fragment (amino acids 21-420) is a high-purity protein designed for research on vasoactive and inflammatory peptide regulation. This fragment fully encompasses the Peptidase M14 domain, making it an ideal tool for studying enzymatic activity and domain-specific functions in vitro. Carboxypeptidase N (CPN) is a secreted plasma enzyme that protects the body by inactivating potent vasoactive and inflammatory peptides containing C-terminal arginine or lysine residues, such as kinins and anaphylatoxins. By cleaving these peptides in the extracellular space, CPN plays a critical role in regulating inflammatory responses and maintaining vascular homeostasis. The full-length protein functions as a key modulator of peptide hormone activity, and its catalytic chain is essential for carboxypeptidase activity in human serum.