



Recombinant Protein Technical Manual

Recombinant Human XPNPEP1 Protein (His Tag)

RPES2829

Product Data:

Product SKU: RPES2829

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: Q9NQW7

Protein Information:

Molecular Mass: 70.6 kDa

AP Molecular Mass: 77 kDa

Tag: C-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

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

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as a 0.2 µm filtered solution of 20mM TrisHCl, 10% Glycerol, pH 8.0.

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

Application:

Synonyms: Xaa-Pro Aminopeptidase 1; Aminoacylproline Aminopeptidase; Cytosolic Aminopeptidase P; Soluble Aminopeptidase P; sAmp; X-Pro Aminopeptidase 1; X-Prolyl Aminopeptidase 1 Soluble; XPNPEP1; XPNPEPL; XPNPEPL1

Immunogen Information:

Sequence: Pro2-His623

Background:

X-Prolyl Aminopeptidase (XPNPEP1) is a proline-specific metalloaminopeptidase that specifically catalyzes the removal of any unsubstituted N-terminal amino acid that is adjacent to a penultimate proline residue. Because of its specificity toward proline, it has been suggested that X-Prolyl Aminopeptidase is important in the maturation and degradation of peptide hormones, neuropeptides, and tachykinins, as well as in the digestion of otherwise resistant dietary protein fragments, thereby complementing the pancreatic peptidases. X-Prolyl Aminopeptidase is a member of the M24 family of metalloproteases, which also contains methionine aminopeptidases, X-Pro dipeptidase, aminopeptidase P2, aminopeptidase P homolog, proliferation-associated protein 1, and suppressor of Ty homolog or chromatin-specific transcription elongation factor large subunit. It is a soluble enzyme, in contrast to the GPI-anchored Aminopeptidase P2 encoded by XPNPEP2. Deficiency of X-Prolyl Aminopeptidase results in excretion of large amounts of amino-oligopeptides in urine. Human Aminopeptidase P1 is widely expressed. The amino acid sequence of human X-Prolyl Aminopeptidase is 99%, 97%, 95%, 74% and 73% identical to that of canine, bovine, mouse/rat, Xenopus and zebrafish, respectively.