

Recombinant Protein Technical Manual

Recombinant Human XPNPEP2 Protein (His Tag)(Active) RPES4835

Product Data:

Product SKU: RPES4835 **Size:** 10μg

Species: Human Expression host: HEK293 Cells

Uniprot: 043895

Protein Information:

Molecular Mass: 72 kDa

AP Molecular Mass:

Tag: C-His

Bio-activity: Measured by its ability to cleave the fluorogenic peptide substrate, H-Lys(2-

Aminobenzoyl)Pro-Pro-pNitroanilide(K(Abz)PP-pNA). The specific activity is > 300

pmoles/min/μg.

Purity: > 97 % as determined by reducing SDS-PAGE.

Endotoxin: $< 1.0 \text{ EU per } \mu \text{g}$ 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 PBS, pH 7.4

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

Application:

Synonyms: Xaa-Pro Aminopeptidase 2; Aminoacylproline Aminopeptidase; Membrane-Bound

Aminopeptidase P; Membrane-Bound APP; Membrane-Bound AmP; mAmP; X-Pro

Aminopeptidase 2; XPNPEP2

Immunogen Information:

Sequence: Met 1-Ala 650

Background:

Aminopeptidase P (APP) is a hydrolase specific for N-terminal imido bonds, which are common to several collagen degradation products, neuropeptides, vasoactive peptides, and cytokines. A membrane-bound and soluble form of this enzyme (XPNPEP2) have been identified as products of two separate genes. XPNPEP2, the X-linked gene that encodes membranous aminopeptidase P (APP), has been reported to associate with APP activity. The membrane aminopeptidase P (XPNPEP2) is largely limited in distribution to endothelia and brush border epithelia. APP and XPNPEP2 contain homologous blocks of sequence common to members of the "pita bread-fold" protein family, of which Escherichia coli methionine aminopeptidase is the prototype. The C-2399A variant in XPNPEP2 is associated with reduced APP activity and a higher incidence of AE-ACEi. XPNPEP2 mRNA was detected in fibroblasts that carry the translocation, suggesting that this gene at least partially escapes X inactivation. XPNPEP2 is a candidate gene for premature ovarian failure (POF).