

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Aminopeptidase P2/XPNPEP2 in Western blots. In Western blots, approximately 40% cross-reactivity with recombinant mouse Aminopeptidase P2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Aminopeptidase P2/XPNPEP2 His22-Ala650 Accession # AAB96394
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human Aminopeptidase P2/XPNPEP2 (Catalog # 2490-ZN)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The human XPNPEP2 gene encodes Aminopeptidase P2 (APP2), which is also known as X-prolyl Aminopeptidase 2 or membrane bound Aminopeptidase P (1-4). It is a member of the M24 family of metalloproteases, which also contains methionine Aminopeptidases, X-Pro dipeptidase, Aminopeptidase P1, Aminopeptidase P homolog, proliferation-associated protein 1, and suppressor of Ty homolog or chromatin-specific transcription elongation factor large subunit (5). Mammalian APP2 are predicted to be GPI-anchored membrane proteases and their biological functions have been reviewed (6). Human APP2 is widely expressed in many adult tissues with the highest levels in the kidney (7). The purified recombinant human APP2 corresponds to the ectodomain and is shown here to be an active aminopeptidase, removing a N-terminal amino acid from a peptide that contains a Pro residue at the second position.

References:

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3. Cottrell, G.S. *et al.* (1998) *Biochem. Soc. Trans.* **26**:S248.
4. Prueitt, R.L. *et al.* (2000) *Cytogenet. Cell Genet.* **89**:44.
5. Barrett, A.J. *et al.* (2004) *Handbook of Proteolytic Enzymes*, Elsevier Academic Press, San Diego.
6. Simmons, W.H. (2004) in *Handbook of Proteolytic Enzymes* (Barrett, A.J. *et al.* eds.) p. 934, Elsevier Academic Press, San Diego.
7. Ersahin C. *et al.* (2005) *Arch. Biochem. Biophys.* **435**:303.

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