

DESCRIPTION

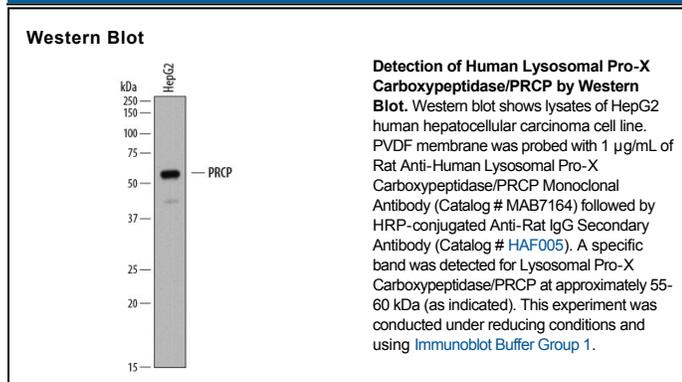
Species Reactivity	Human
Specificity	Detects human Lysosomal Pro-X Carboxypeptidase/PRCP in ELISAs.
Source	Monoclonal Rat IgG _{2A} Clone # 860821
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Lysosomal Pro-X Carboxypeptidase/PRCP Met1-His496 Accession # P42785
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

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	1 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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

PRCP (Prolylcarboxypeptidase; also PCP, lysosomal Pro-X carboxypeptidase and lysosomal carboxypeptidase C) is a lysosomal 57-62 kDa glycoprotein member of the S28 family of proteases. It is expressed by a number of cells including fibroblasts, macrophages, and endothelial cells. PRCP cleaves a variety of single C-terminal amino acids (aa) adjacent to a Pro residue and is known to act on, and inactivate, peptides such as prekallikrein, α-MSH and angiotensin II plus III. Human PRCP is apparently synthesized as a prepropeptide that contains a signal sequence (aa 1-21), a short prosequence (aa 22-45) and a 451 aa mature region (aa 46-496). The mature region demonstrates a Ser-carboxypeptidase domain (aa 55-477) that, in itself, possesses an SKS domain that caps the enzyme's catalytic site. The molecule is known to be mannosylated and to form noncovalent homodimers. There is one splice variant that contains a 21 aa insertion after Lys56. Over aa 1-496, human and mouse PRCP share 77% aa sequence identity.