**DESCRIPTION**

**Species Reactivity**  Human

**Specificity**  Detects human Lysosomal Pro-X Carboxypeptidase/PRCP in ELISAs.

**Source**  Monoclonal Rat IgG2A 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.

<table>
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<tr>
<th>Recommended Concentration</th>
<th>Sample</th>
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<td>1 μg/mL</td>
<td>See Below</td>
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**DATA**

**Western Blot**

Detection of Human Lysosomal Pro-X Carboxypeptidase/PRCP by Western Blot. Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line. PVDF membrane was probed with 1 μg/mL of Rat Anti-Human Lysosomal Pro-X Carboxypeptidase/PRCP Monoclonal Antibody (Catalog # MAB7164) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). A specific band was detected for Lysosomal Pro-X Carboxypeptidase/PRCP at approximately 55-60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**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 as supplied.

**Stability & Storage**

- 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.