**DESCRIPTION**

**Species Reactivity** Human

**Specificity** Detects human Cathepsin X/Z/P in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human Cathepsin B, C, L, L2/V, O, S, or recombinant mouse Cathepsin F is observed.

**Source** Monoclonal Mouse IgG₂A Clone # 163702

**Purification** Protein A or G purified from hybridoma culture supernatant

**Immunogen** Mouse myeloma cell line NS0-derived recombinant human Cathepsin X/Z/P Ala21-Val303 (Gly23Val, Ser48Thr)

**Accession #** Q9UBR2

**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>
<thead>
<tr>
<th>Recommended Concentration</th>
<th>Sample</th>
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<tbody>
<tr>
<td>Western Blot</td>
<td>Recombinant Human Cathepsin X/Z/P (Catalog # 934-CY)</td>
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<tr>
<td>Immunoprecipitation</td>
<td>Conditioned cell culture medium spiked with Recombinant Human Cathepsin X/Z/P (Catalog # 934-CY), see our available Western blot detection antibodies</td>
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</tbody>
</table>

**PREPARATION AND STORAGE**

**Reconstitution** Reconstitute at 0.5 mg/mL in sterile PBS.

**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.

- 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**

Cathepsin X (also known as Cathepsin Z and P) is a cysteine protease of the papain family (1-5). Compared to other members of the papain family, Cathepsin X has a short proregion and unique insertions. The cysteine residue in the proregion forms a covalent and reversible bond with the active site cysteine residue (6). Acting as a carboxypeptidase, Cathepsin X displays a unique specificity (7-10). It is ubiquitously expressed in human tissues and conserved in other species such as mouse, nematode and echinuran. The nematode enzyme is apparently involved in molting of third stage larvae (11).

**References:**