

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Cathepsin X/Z/P in Western blots. In Western blots, less than 1% cross-reactivity with recombinant human (rh) Cathepsin A, rhCathepsin B, rhCathepsin C, rhCathepsin D, and rhCathepsin L is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Cathepsin X/Z/P Ala21-Val303 (Gly23Val, Ser48Thr) Accession # Q9UBR2
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

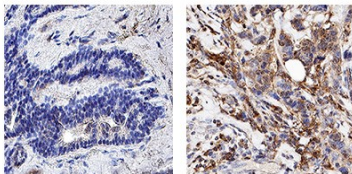
## APPLICATIONS

**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
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human Cathepsin X/Z/P (Catalog # 934-CY)
<b>Immunohistochemistry</b>	3-15 µg/mL	Immersion fixed paraffin-embedded sections of human breast cancer tissue

## DATA

### Immunohistochemistry



Normal Breast

Breast Cancer

#### Cathepsin X/Z/P in Human Breast Cancer Tissue.

Cathepsin X/Z/P was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using Goat Anti-Human Cathepsin X/Z/P Biotinylated Antigen Affinity-purified Polyclonal Antibody (Catalog # BAF934) at 3 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Goat IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC004). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm. Staining was performed using our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

## PREPARATION AND STORAGE

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

## 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:

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