

DESCRIPTION

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| Species Reactivity | Mouse |
| Specificity | Detects mouse Cathepsin X/Z/P in direct ELISAs and Western blots. In direct ELISAs, approximately 40% cross-reactivity with recombinant human Cathepsin X/Z/P is observed and less than 2% cross-reactivity with recombinant mouse Cathepsin B, C, D, H, and L is observed. |
| Source | Polyclonal Goat IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | Mouse myeloma cell line NS0-derived recombinant mouse Cathepsin X/Z/P Ala23-Val306 Accession # Q9WUU7 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. 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 Mouse Cathepsin X/Z/P (Catalog # 1033-C Y) |
| Immunocytochemistry | 5-15 µg/mL | Immersion fixed mouse splenocytes |
| Immunoprecipitation | 25 µg/mL | Conditioned cell culture medium spiked with Recombinant Mouse Cathepsin X/Z/P (Catalog # 1033-C Y), see our available Western blot detection antibodies |
| Neutralization | Measured by its ability to neutralize Recombinant Mouse Cathepsin X/Z/P (0.1 µg/mL, Catalog # 1033-C Y) cleavage of the fluorogenic peptide substrate Mca-RPPGFSAFK(Dnp)-OH (10 µM, Catalog # ES005). The Neutralization Dose (ND ₅₀) is typically 2.0 µg/mL. | |

PREPARATION AND STORAGE

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| 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 | 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 from date of receipt, 2 to 8 °C, reconstituted. ● 6 months from date of receipt, -20 to -70 °C, reconstituted. |

BACKGROUND

Cathepsin X (also known as Cathepsin Z and P) is a relatively new 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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