

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Cathepsin H in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 25% cross-reactivity with recombinant human (rh) Cathepsin H is observed and less than 2% cross-reactivity with recombinant mouse (rm) Cathepsin B, rmCathepsin C, rmCathepsin Z, rmCathepsin L, and rhCathepsin O is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Cathepsin H Glu22-Val333 Accession # Q3UCD6
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

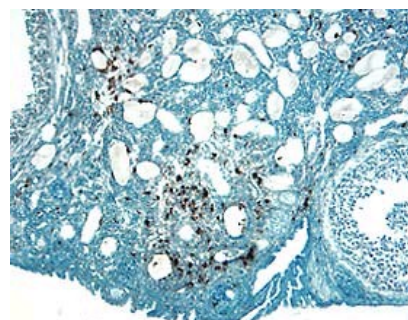
APPLICATIONS

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 H (Catalog # 1013-CY)
Immunohistochemistry	5-15 µg/mL	See Below
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Mouse Cathepsin H (Catalog # 1013-CY), see our available Western blot detection antibodies

DATA

Immunohistochemistry



Cathepsin H in Mouse Ovary.

Cathepsin H was detected in perfusion fixed frozen sections of mouse ovary using 1.7 µg/mL Goat Anti-Mouse Cathepsin H Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1013) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

PREPARATION AND STORAGE

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	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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

Cathepsin H is a lysosomal cysteine protease of the papain family (1). It is synthesized as a precursor protein, consisting of a signal peptide (residues 1-20), a propeptide (residues 21-95), a mini chain (residues 96-103), a heavy chain (residues 114-290) and a light chain (residues 291-333) (2, 3). A truncated form with a 12 amino acid deletion in the signal peptide region is secreted (4). Cathepsin H is the only known mono-aminopeptidase in the papain family (5). Cathepsin H expression is significantly increased in disease states such as in prostate tumors, sera of asthmatic patients, and mucosa of colorectal cancer patients (4, 6, 7).

References:

1. Kirschke, H. (2004) in *Handbook of Proteolytic Enzymes* (ed. Barrett, *et al.*) p. 1089, Academic Press, San Diego.
2. Lafuse, W.P. *et al.* (1995) J. Leukoc. Biol. **57**:663.
3. Soderstrom, M. *et al.* (1999) Biochim. Biophys. Acta **1446**:35.
4. Waghray, A. *et al.* (2002) J. Biol. Chem. **277**:11533.
5. Guncar, G. *et al.* (1998) Structure **6**:51.
6. Cimerman, N. *et al.* (2001) Clin. Chim. Acta **310**:113.
7. del Re, E.C. *et al.* (2000) Br. J. Cancer. **82**:1317.