

**DESCRIPTION**

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Cathepsin H in direct ELISAs and Western blots. In direct ELISAs, less than 2% cross-reactivity with recombinant mouse (rm) Cathepsin L, and rmCathepsin J is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse Cathepsin H Glu22-Val333 Accession # Q3UCD6
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

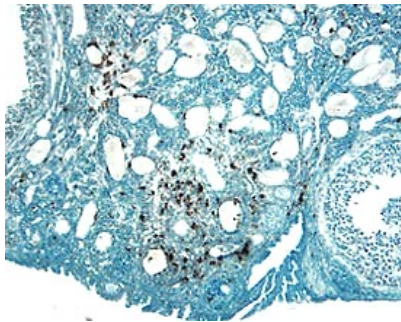
**APPLICATIONS**

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 µg/mL	Recombinant Mouse Cathepsin H (Catalog # 1013-CY)
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below
<b>Immunoprecipitation</b>	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Mouse Cathepsin H (Catalog # 1013-CY), see our available <a href="#">Western blot detection antibodies</a>

**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**

<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. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <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 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.