

## DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse and human Cystatin C in direct ELISAs. In sandwich immunoassays, approximately 10% cross-reactivity with recombinant human (rh) Cystatin D is observed and less than 2% cross-reactivity with rhCystatin S/A, rhCystatin A, recombinant mouse (rm) Cystatin B, rhCystatin S/N, and rmCystatin E/M 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 Cystatin C (R & D Systems, Catalog # 1238-PI) Ala21-Ala140 Accession # P21460
<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 as a 0.2 µm filtered solution in PBS.

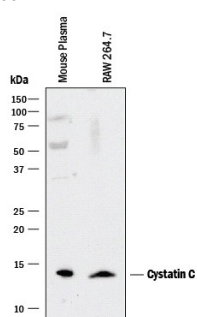
## APPLICATIONS

**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.

	Recommended Concentration	Sample
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below
<b>Immunoprecipitation</b>	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Mouse Cystatin C (Catalog # 1238-PI), <a href="#">see our available Western blot detection antibodies</a>
<b>Mouse Cystatin C Sandwich Immunoassay</b>		<b>Reagent</b>
<b>ELISA Capture</b>	0.2-0.8 µg/mL	Mouse Cystatin C Antibody (Catalog # AF1238)
<b>ELISA Detection</b>	0.1-0.4 µg/mL	Mouse Cystatin C Biotinylated Antibody (Catalog # BAF1238)
<b>Standard</b>		Recombinant Mouse Cystatin C (Catalog # 1238-PI)

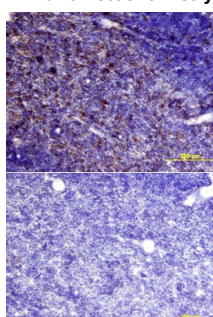
## DATA

**Western Blot**



**Detection of Mouse Cystatin C by Western Blot.** Western blot shows lysates of mouse plasma and RAW 264.7 mouse monocyte/macrophage cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Mouse Cystatin C Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1238) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for Cystatin C at approximately 14 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**Immunohistochemistry**



**Cystatin C in Mouse Spleen.** Cystatin C was detected in immersion fixed frozen sections of mouse spleen using Mouse Cystatin C Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1238) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Lower panel shows a lack of labeling if primary antibodies are omitted and tissue is stained only with secondary antibody followed by incubation with detection reagents. 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>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <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

Cystatin C is a member of family 2 of the cystatin superfamily (1). It is involved in processes such as tumor invasion and metastasis, inflammation and some neurological diseases. It inhibits many cysteine proteases such as papain and cathepsins B, H, K, L and S (2, 3). All mouse tissues analyzed expressed Cystatin C, with relative levels similar to those of rat and human tissues. For all three species, brain and liver had the highest and lowest levels of Cystatin C, respectively, whereas kidney, spleen and muscle had the levels in between (4). The high degree of similarity in distribution and functional properties for mouse, rat and human Cystatin C indicates that a murine model should be relevant for studies of the human disease, hereditary Cystatin C amyloid angiopathy (4).

## References:

1. Reed, C.H. (2000) *British J. Biomed. Sci.* **57**:323.
2. Janowski, R. *et al.* (2001) *Nat. Struct. Biol.* **8**:316.
3. Abrahamson, M. (1994) *Methods Enzymol.* **244**:685.
4. Hakansson, K. *et al.* (1996) *Comp. Biochem. Physiol.* **114B**:303.