

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Cystatin C in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 50% cross-reactivity with recombinant mouse Cystatin C is observed and less than 5% cross-reactivity with recombinant human (rh) Fetuin A, rhFetuin B, rhCystatin A, rhCystatin B, rhCystatin S, and rhCystatin 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 human Cystatin C Ser27-Ala146 Accession # P01034
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

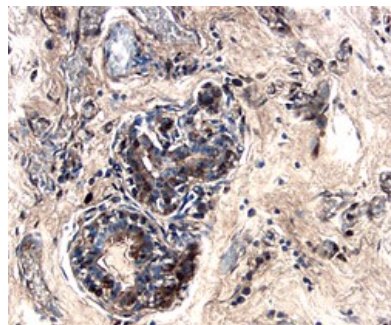
## APPLICATIONS

**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
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human Cystatin C (Catalog # 1196-PI)
<b>Immunohistochemistry</b>	5-15 µg/mL	See Below
<b>Immunoprecipitation</b>	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Cystatin C (Catalog # 1196-PI), see our available <a href="#">Western blot detection antibodies</a>
<b>Neutralization</b>		Measured by its ability to neutralize Recombinant Human Cystatin C (0.64 µg/mL, Catalog # 1196-PI) inhibition of Papain (0.1 µg/mL) cleavage of the fluorogenic peptide substrate Z-FR-AMC (100 µM, Catalog # ES009). The Neutralization Dose (ND <sub>50</sub> ) is typically 7.8 µg/mL.

## DATA

### Immunohistochemistry



**Cystatin C in Human Breast.** Cystatin C was detected in immersion fixed paraffin-embedded sections of human breast using 5 µg/mL Human Cystatin C Antigen Affinity-purified Polyclonal Antibody (Catalog # AF1196) 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). Specific labeling was localized to the cytoplasm in cells of terminal ductules. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded 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.
<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 from date of receipt, 2 to 8 °C, reconstituted.</li> <li>● 6 months from date of receipt, -20 to -70 °C, reconstituted.</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). It is ubiquitous in human tissues and body fluids. A point mutation in the gene coding for the 120 amino acid mature Cystatin C causes a hereditary form of amyloid angiopathy in which the protein variant (Leu68 to Gln) is deposited in the cerebral arteries, leading to fatal cerebral hemorrhage (4). Cystatin C may have additional clinical applications. For example, it is a good marker for glomerular filtration rate (5).

### 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. Abrahamson, M. *et al.* (1992) Hum. Genet. **89**:377.
5. Laterza, O.F. *et al.* (2002) Clin. Chem. **48**:699.