

## DESCRIPTION

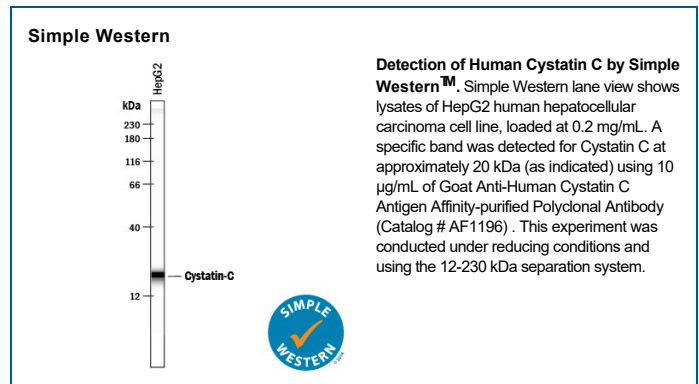
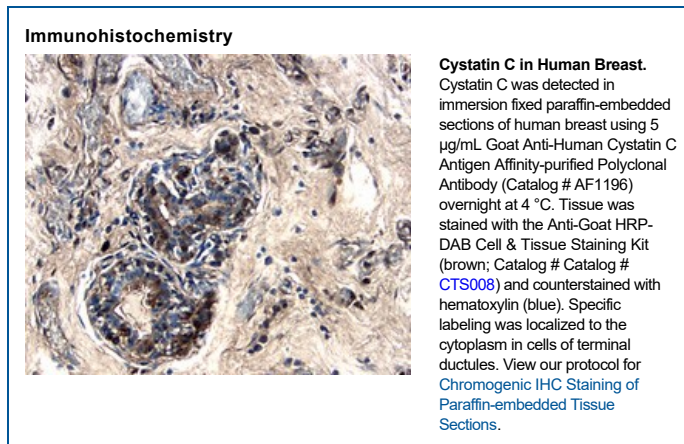
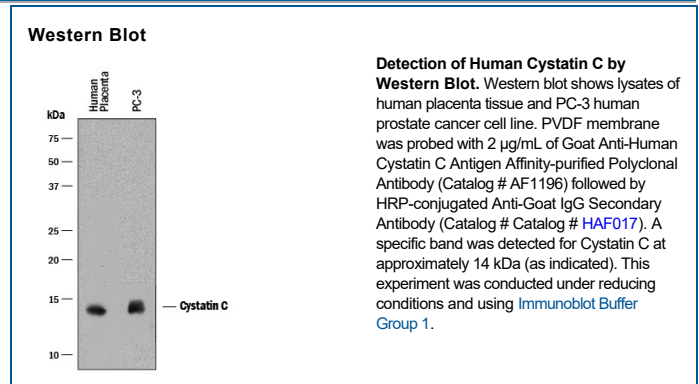
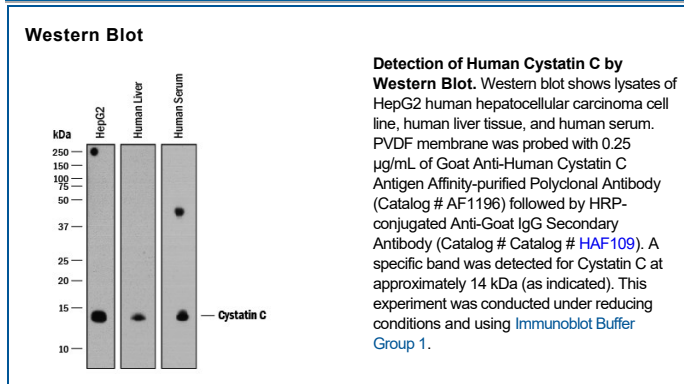
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Cystatin C in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 50% cross-reactivity with recombinant mouse Cystatin C is observed and less than 5% cross-reactivity with recombinant human (rh) Fetuin A, 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. *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>	0.25-2 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 Human Cystatin C (Catalog # 1196-PI), see our available <a href="#">Western blot detection antibodies</a>
<b>Simple Western</b>	10 µg/mL	See Below
<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 12-112 µg/mL.	

## DATA



## 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

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.