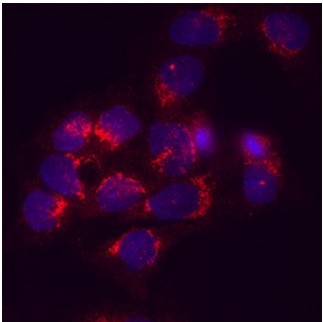
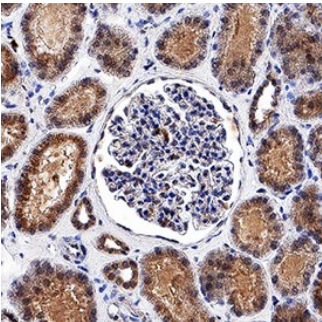


DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human Cystatin C in direct ELISA. In direct ELISA, no cross-reactivity with recombinant human (rh) Cystatins A, B, D, E/M, S, SA, SN, rhFetuin A, B, or rhHPRG (Histidine-Proline-Rich Glycoprotein) is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 197814
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Cystatin C Ser27-Ala146 Accession # P01034
Formulation	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. <i>General Protocols</i> are available in the <i>Technical Information</i> section on our website.		
	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	Immersion fixed HepG2 Human Hepatocellular Carcinoma Cell Line.
Immunohistochemistry	5-25 µg/mL	Immersion fixed paraffin-embedded sections of Human Kidney

DATA	
<p>Immunocytochemistry</p>  <p>Cystatin C in HepG2 Human Hepatocellular Carcinoma Cell Line. Cystatin C was detected in immersion fixed HepG2 Human Hepatocellular Carcinoma Cell Line using Mouse Anti-Human Cystatin C Monoclonal Antibody (Catalog # MAB11963) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>	<p>Immunohistochemistry</p>  <p>Detection of Cystatin C in Human Kidney. Cystatin C was detected in immersion fixed paraffin-embedded sections of Human Kidney using Mouse Anti-Human Cystatin C Monoclonal Antibody (Catalog # MAB11963) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to convoluted tubules. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.</p>

PREPARATION AND STORAGE	
Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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

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.