Human Cystatin C Antibody

Monoclonal Mouse IgG_{2B} Clone # 197807

Catalog Number: MAB1196

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Cystatin C in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human (rh) Cystatins A, B, D, E/M, S, SA, SN, rhFetuins A, B, or rhHPRG (Histidine-Proline-Rich Glycoprotein) is observed.
Source	Monoclonal Mouse IgG_{2B} Clone # 197807
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 as a 0.2 μm filtered solution in PBS.

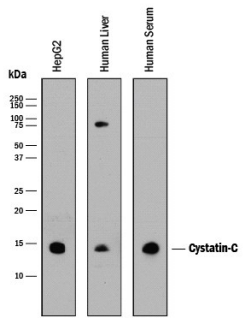
APPLICATIONS

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
Western Blot	1-2 µg/mL	See Below
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Cystatin C (Catalog # 1196-PI), see our available Western blot detection antibodies

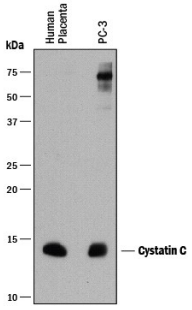
DATA

Western Blot



Detection of Human Cystatin C by Western Blot. Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line, human liver tissue, and human serum. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human Cystatin C Monoclonal Antibody (Catalog # MAB1196) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). 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.

Western Blot



Detection of Human Cystatin C by Western Blot. Western blot shows lysates of human placenta tissue and PC-3 human prostate cancer cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human Cystatin C Monoclonal Antibody (Catalog # MAB1196) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). 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.

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.** ● 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.

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