

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Cystatin C in ELISAs. In sandwich immunoassays, no cross-reactivity or interference with recombinant human Cystatin A, B, D, E/M, F, S, SA, SN, X/Z/P, or recombinant mouse Cystatin C is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 197821
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 BSA as a carrier protein. 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.

Human Cystatin C Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Human Cystatin C Antibody (Catalog # MAB11962)
ELISA Detection	0.5-2.0 µg/mL	Human Cystatin C Biotinylated Antibody (Catalog # BAM11961)
Standard		Recombinant Human Cystatin C (Catalog # 1196-P1)

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.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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.