

DESCRIPTION

Species Reactivity	Rat
Specificity	Detects rat Cystatin C in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 678920
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant rat Cystatin C Gly21-Ala140 Accession # P14841
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.

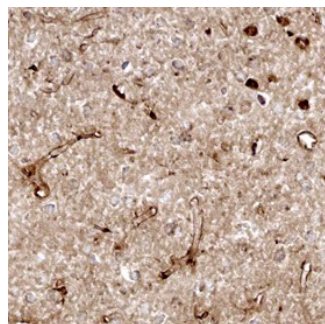
APPLICATIONS

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
Immunohistochemistry	8-25 µg/mL	See Below
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Rat Cystatin C (Catalog # 6154-PI), see our available Western blot detection antibodies

DATA

Immunohistochemistry



Cystatin C in Rat Endothelial Cells.
Cystatin C was detected in perfusion fixed frozen sections of rat brain using Mouse Anti-Rat Cystatin C Monoclonal Antibody (Catalog # MAB6154) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counter-stained with hematoxylin (blue). Specific staining was localized to endothelial cells in vasculature. View our protocol for [Chromogenic IHC Staining of Frozen Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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 in 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 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.