Human Cystatin B Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF1408

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Cystatin B in direct ELISAs and Western blots. In Western blots, less than 2% cross-reactivity with recombinant human (rh) Cystatin A, recombinant mouse Cystatin B, rhCystatin C, rhCystatin D, rhCystatin E/M, rhCystatin S, rhCystatin SA, and rhCystatin SN is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human Cystatin B Met2-Phe98 Accession # P04080
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. 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.*

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human Cystatin B (Catalog # 1408-PI)
Immunohistochemistry	5-15 µg/mL	Immersion fixed paraffin-embedded sections of human bladder, colon, and heart
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Cystatin B (Catalog # 1408-PI), see our available Western blot detection antibodies

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 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	**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 B, also called stefin B or liver thiol proteinase inhibitor, is a member of family 1 of the cystatin superfamily (1). Like Cystatin A, it is an intracellular inhibitor regulating the activities of cysteine proteases of the papain family such as cathepsins B, H and L (2). Mutations in the Cystatin B gene is the cause of progressive myoclonus epilepsy (EPM1) (3). Because of its expression patterns, Cystatin B can be used as a marker for certain cancers, such as glioblastoma tumors (4). It readily forms amyloid fibrils *in vitro* (5). The human Cystatin B consists of 98 amino acid residues (3).

References:

1. Abrahamson, M. (1994) Methods Enzymol. **244**:685.
2. Pol, E. and I. Bjork (1999) Biochemistry **38**:10519.
3. Pennacchio, L.A. *et al.* (1996) Science **271**:1731.
4. Zhang, R. *et al.* (2003) Glia **42**:194.
5. Zerovnik, E. *et al.* (2002) Biochim. Biophys. Acta **1594**:1.