

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Cystatin A in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human (rh) Cystatins B, C, D, E/M, F, S, SA, rhFetuin A, rhFetuin B, rhHPRG, rhKininogen, or rhKininostatin is observed.
Source	Monoclonal Mouse IgG _{2A} Clone # 224705
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Cystatin A Ile2-Phe98 Accession # P01040
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 µg/mL	Recombinant Human Cystatin A (Catalog # 1407-PI)
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Cystatin A (Catalog # 1407-PI), see our available Western blot detection antibodies

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 A, also called stefin A, Cystatin AS or keratolinin, is a member of family 1 of the cystatin superfamily (1, 2). Like Cystatin B, it is an intracellular inhibitor regulating the activities of cysteine proteases of the papain family such as cathepsins B, H and L (3). For example, immunohistochemical analysis of Cystatin A and cathepsin L is a useful indicator for malignancy in human epidermal keratinocytes (4). The ratio of cathepsin B and Cystatin A can be used in the differential diagnosis and treatment of patients with prostate carcinoma (5). The human Cystatin A consists of 98 amino acids (1).

References:

1. Kartasova, T. *et al.* (1987) *Nucleic Acids Res.* **15**:5945.
2. Abrahamson, M. (1994) *Methods Enzymol.* **244**:685.
3. Jenko, S. *et al.* (2003) *J. Mol. Biol.* **326**:875.
4. Palungwachira, P. *et al.* (2002) *J. Dermatol.* **29**:573.
5. Sinha, A.A. *et al.* (2002) *Cancer* **94**:3141.