

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Cystatin S in direct ELISAs and Western blots. In direct ELISAs, 100% cross-reactivity with recombinant human (rh) Cystatin SA is observed and no cross-reactivity with rhCystatin D, E, SN, rhFetuin A, rhFetuin B, or rhHPRG (Histidine-Proline-Rich Glycoprotein) is observed. In Western blots, approximately 15% cross-reactivity with rhCystatins SA and SN (under reducing conditions only) is observed and no cross-reactivity with rhCystatin A, B, C, D, E/M, rhFetuin A, rhFetuin B, or rhHPRG is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 201805
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Cystatin S Ser21-Ala141 Accession # P01036
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or 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
<b>Western Blot</b>	1 µg/mL	Recombinant Human Cystatin S (Catalog # <a href="#">1296-PI</a> )
<b>Immunoprecipitation</b>	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Cystatin S (Catalog # <a href="#">1296-PI</a> ), see our available <a href="#">Western blot detection antibodies</a>

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Cystatin S is a member of family 2 of the Cystatin superfamily (1). Like Cystatins SA and SN, it is produced by the salivary gland and secreted largely in the submandibular/sublingual saliva (2). Unlike Cystatins SA and SN, Cystatin S is not a potent inhibitor of cysteine proteases such as papain and some cathepsins (3). Cystatin S is partially phosphorylated at Ser21 and Ser23 in saliva (4). The functions of Cystatin S are largely unknown. However, it is able to bind more calcium and bind more rapidly to carbonated apatite than cystatins SA or SN, indicating that Cystatin S may be involved in the mineral balance of the tooth (3).

### References:

1. Abrahamson, M. (1994) *Methods Enzymol.* **244**:685.
2. Baron, A.C. *et al.* (1999) *Oral. Dis.* **5**:344.
3. Baron, A. *et al.* (1999) *Oral Dis.* **5**:234.
4. Isemura, S. *et al.* (1991) *J. Biochem.* **110**:648.