

Mouse Anti-Human Cystatin S Monoclonal Antibody

Cat. No. CAB11521MH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Mouse Monoclonal Antibody to Human Cystatin S
Species	Human
Source	Mouse
Antigen Description	Cystatin-S, also known as Cystatin-4, Salivary acidic protein 1, Cystatin-SA-III and CST4, is a secreted protein which belongs to the cystatin family. Cystatin-4 / CST4 is expressed in submandibular and sublingual saliva but not in parotid saliva (at protein level). It is also expressed in saliva, tears, urine and seminal fluid. The cystatin superfamily encompasses proteins that contain multiple cystatin-like sequences. Some of the members are active cysteine protease inhibitors, while others have lost or perhaps never acquired this inhibitory activity. There are three inhibitory families in the superfamily, including the type 1 cystatins (stefins), type 2 cystatins and the kininogens. The type 2 cystatin proteins are a class of cysteine proteinase inhibitors found in a variety of human fluids and secretions. Cystatin-4 / CST4 strongly inhibits papain and ficin, partially inhibits stem bromelain and bovine cathepsin C, but does not inhibit porcine cathepsin B or clostripain. Papain is inhibited non-competitively. Cystatin-4 / CST4 is an S-type cystatin, based on its high level of expression in saliva, tears and seminal plasma. The specific role in these fluids is unclear but antibacterial and antiviral activity is present, consistent with a protective function.
Specificity	Human Cystatin S / CST4. No cross-reactivity with human cell lysate (293 cell line) in ELISA.

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Immunogen	Recombinant Human Cystatin S / CST4 Protein
Isotype	Mouse IgG2a
Clone	10F3F3
Applications	WB; ELISA
Dilution	Western blot: This antibody can be used at 1-2 µg/mL with the appropriate secondary reagents to detect Human CST4 in WB. Using a DAB detection system, the detection limit for Human CST4 is approximately 2 ng/lane under non-reducing conditions and 100 ng/lane under reducing conditions. ELISA: This antibody can be used at 0.5-1 µg with the appropriate secondary reagents to detect Human CST4. The detection limit for Human CST4 is approximately 0.00975 ng/well.
Preparation	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, human cell-derived, recombinant Human Cystatin S / CST4. The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
Format	0.2 µm filtered solution in PBS with 5% trehalose
Storage	This antibody can be stored at 2-8 °C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 to -70°C. Preservative-Free. Sodium azide is recommended to avoid contamination (final concentration 0.05%-0.1%). It is toxic to cells and should be disposed of properly. Avoid repeated freeze-thaw cycles.

GENE INFORMATION

Gene Name	CST4 cystatin S [Homo sapiens]
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Official Symbol	CST4
Synonyms	CST4; cystatin S; cystatin-S; cystatin 4; cystatin-4; cystatin-SA-III; salivary acidic protein 1; MGC71923;
Gene ID	1472
mRNA Refseq	NM_001899
Protein Refseq	NP_001890
MIM	123857
UniProt ID	P01036
Chromosome Location	20p11.2
Pathway	Salivary secretion, organism-specific biosystem; Salivary secretion, conserved biosystem;
Function	cysteine-type endopeptidase inhibitor activity; peptidase inhibitor activity;

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