BACKGROUND

The cystatin superfamily is a well-established family of cysteine protease inhibitors. Cystatins A and B (type 1) are mainly intracellular; cystatins C, D, E/M, F, G, S, SN and SA cystatins are extracellular (type 2); and the kininogens are type 3 cystatins which are intravascular proteins. All true cystatins inhibit cysteine proteases of the Papain family, such as cathepsins, and some also inhibit legumain family enzymes. Cystatin SA, cystatin S and cystatin SN are found primarily in saliva. Cystatin S and SN can also be expressed in tears, urine and seminal fluid. Cystatin C is a related protein which is expressed in brain, thymus, ovary, epidermis and vas deferens. Cystatin D protects against proteinases in the oral cavity, while Cystatin E/M and F moderate the inhibition of cathepsin proteins. The fetuins, part of the cystatin superfamily, are secretable proteins that influence osteogenesis and bone resorption, regulation of the Insulin and hepatocyte growth factor receptors and the response to systemic inflammation. High molecular weight kininogen (Kininogen HC) and low molecular weight kininogen (Kininogen LC) have varied roles, though they both inhibit the Thrombin- and Plasmin-induced aggregation of thrombocytes.

REFERENCES


CHROMOSOMAL LOCATION


SOURCE

cystatin S/SA/SN (Z8983) is a mouse monoclonal antibody raised against amino acids 21-141 of cystatin SA/SN of human origin.

PRODUCT

Each vial contains 100 µg IgG₂B in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

cystatin S/SA/SN (Z8983) is recommended for detection of cystatin SA, S and SN of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].


Molecular Weight of cystatin S/SA/SN: 16 kDa.

Positive Controls: human salivary gland extract: sc-363762.

DATA


SELECT PRODUCT CITATIONS


PROTOCOLS

See our website at www.scbt.com for detailed protocols and support products.