

C1INH (m): 293T Lysate: sc-126534

BACKGROUND

The serine proteinase inhibitors (serpins) comprise a superfamily of proteins with a diverse set of functions, including the control of complement activation, blood coagulation, programmed cell death and cell development. Serpins are secreted glycoproteins that contain a stretch of peptide that mimics a true substrate for a corresponding serine protease. The most abundant serpins in human plasma are α -1-antitrypsin (AAT) and α -1-antichymotrypsin (AACT). Other serpin family members include pigment epithelium-derived growth factor (PEDF), human protease nexin 1 (PN-1), protease inhibitor 6 (PI-6), thyroxine-binding globulin precursor (TBG), protease inhibitor 9 (PI-9), serine protease inhibitor 3 (Spi3), plasma protease C1 inhibitor (C1INH), Headpin, SerpinB12, monocyte/neutrophil elastase inhibitor members 1a,1b and 1c (M/NEI) and squamous cell carcinoma antigens 1 and 2 (SCCA1/2). Antithrombin-III (ATIII) is a crucial serine protease inhibitor that regulates the coagulation cascade in blood and inhibits Thrombin.

REFERENCES

1. Curd, J.G., Yelvington, M., Ziccardi, R.J., Mathison, D.A. and Griffin, J.H. 1981. Purification and characterization of two functionally distinct forms of C1 inhibitor from a patient with angioedema. *Clin. Exp. Immunol.* 145: 261-270.
2. Pixley, R.A., Schapira, M. and Colman, R.W. 1985. The regulation of human Factor Xlla by plasma proteinase inhibitors. *J. Biol. Chem.* 260: 1723-1729.
3. Gronski, P., Bodenbender, L., Kanzy, E.J., Piepenbrock, M. and Seiler, F.R. 1986. The functional inhibition of activated C1 inhibitor in normal human serum causes spontaneous consumption of the complement components C2, C3, C4, and Factor B. *Immunobiology* 171: 252-262.
4. Reboul, A., Prandini, M.H. and Colomb, M.G. 1987. Proteolysis and deglycosylation of human C1 inhibitor. Effect on functional properties. *Biochem. J.* 244: 117-121.
5. Roeise, O., Stadaas, J.O. and Aasen, A.O. 1989. Methylprednisolone affects inhibitors of the complement and the contact systems; functional and immunochemical studies on α ₂-Macroglobulin and C1 inhibitor. *Thromb. Res.* 56: 697-708.
6. Wuillemin, W.A., Minnema, M., Meijers, J.C., Roem, D., Eerenberg, A.J., Nuijens, J.H., ten Cate, H. and Hack, C.E. 1995. Inactivation of Factor Xla in human plasma assessed by measuring Factor Xla-protease inhibitor complexes: major role for C1-inhibitor. *Blood* 85: 1517-1526.
7. Liu, D., Gu, X., Scafidi, J. and Davis, A.E., 3rd. 2004. N-linked glycosylation is required for C1 inhibitor-mediated protection from endotoxin shock in mice. *Infect. Immun.* 72: 1946-1955.
8. Davis, A.E., 3rd. 2005. The pathophysiology of hereditary angioedema. *Clin. Immunol.* 114: 3-9.
9. Szeplaki, G., Varga, L., Valentin, S., Kleiber, M., Karadi, I., Romics, L., Fust, G. and Farkas, H. 2005. Adverse effects of danazol prophylaxis on the lipid profiles of patients with hereditary angioedema. *J. Allergy Clin. Immunol.* 115: 864-869.

CHROMOSOMAL LOCATION

Genetic locus: Serping1 (mouse) mapping to 2 D.

PRODUCT

C1INH (m): 293T Lysate represents a lysate of mouse C1INH transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

C1INH (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive C1INH antibodies. Recommended use: 10-20 μ l per lane.

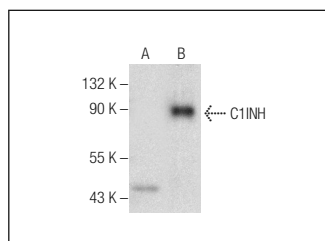
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

C1INH (B-11): sc-377062 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse C1INH expression in C1INH transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



C1INH (B-11): sc-377062. Western blot analysis of C1INH expression in non-transfected: sc-117752 (A) and mouse C1INH transfected: sc-126534 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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