# C1INH (h): 293 Lysate: sc-112306



The Power to Question

## **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  $\alpha$ -1-antitrypsin (AAT) and  $\alpha$ -1-antichymotrypsin (AACT). Other serpin family members include pigment epithelium-derived growth factor (PEDF), human protease nexin 1 (PN-1), protease inhibitor 6 (Pl-6), thyroxine-binding globulin precursor (TBG), protease inhibitor 9 (Pl-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**

- 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.
- Pixley, R.A., Schapira, M. and Colman, R.W. 1985. The regulation of human factor XlIα 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
- 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  $\alpha 2$ -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 XIα in human plasma assessed by measuring factor XIα-protease inhibitor complexes: major role for C1 inhibitor. Blood 85: 1517-1526.
- 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.
- 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.
- 9. Davis, A.E., 3rd. 2005. The pathophysiology of hereditary angioedema. Clin. Immunol. 114: 3-9.

#### **CHROMOSOMAL LOCATION**

Genetic locus: SERPING1 (human) mapping to 11q12.1.

#### **PRODUCT**

C1INH (h): 293 Lysate represents a lysate of human C1INH transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## **APPLICATIONS**

C1INH (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive C1INH antibodies. Recommended use: 10-20 µl per lane.

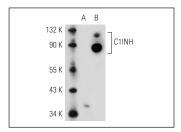
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

C1INH (K-16): sc-46298 is recommended as a positive control antibody for Western Blot analysis of enhanced human C1INH expression in C1INH transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

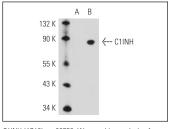
## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048.

## DATA



C1INH (K-16): sc-46298. Western blot analysis of C1INH expression in non-transfected: sc-110760 (**A**) and human C1INH transfected: sc-112306 (**B**) 293 whole cell lysates.



C1INH (4G12): sc-69758. Western blot analysis of C1INH expression in non-transfected: sc-110760 (A) and human C1INH transfected: sc-112306 (B) 293 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 or our catalog for detailed protocols and support products.