SANTA CRUZ BIOTECHNOLOGY, INC.

C1INH (N-15): sc-46300

SANTA CRUZ BIOTECHNOLOGY

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 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. Liu, D., et al. 2004. N-linked glycosylation is required for C1 inhibitor-mediated protection from endotoxin shock in mice. Infect. Immun. 72: 1946-1955.
2. Szeplaki, G., et al. 2005. Adverse effects of danazol prophylaxis on the lipid profiles of patients with hereditary angioedema. J. Allergy. Clin. Immunol. 115: 864-869.
3. Davis, A.E., 3rd. 2005. The pathophysiology of hereditary angioedema. Clin. Immunol.114: 3-9.
4. Kalmar, L., et al. 2005. HAEdb: a novel interactive, locus-specific mutation database for the C1 inhibitor gene. Hum. Mutat. 25: 1-5.
5. Hong, J., et al. 2005. Material-specific thrombin generation following contact between metal surfaces and whole blood. Biomaterials. 26: 1397-1403.
6. SWISS-PROT/TrEMBL (P05155). World Wide Web URL: http://www.expasy.ch/sprot/sprot-top.html

CHROMOSOMAL LOCATION

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

SOURCE

C1INH (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of C1INH of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-46300 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

C1INH (N-15) is recommended for detection of C1INH of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for C1INH siRNA (m): sc-45609, C1INH shRNA Plasmid (m): sc-45609-SH and C1INH shRNA (m) Lentiviral Particles: sc-45609-V.

Molecular Weight of C1INH: 55 kDa.

Molecular Weight of glycosylated C1INH: 75-105 kDa.

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. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.