SANTA CRUZ BIOTECHNOLOGY, INC.

# C1INH (H-300): sc-67150

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.

## CHROMOSOMAL LOCATION

Genetic locus: SERPING1 (human) mapping to 11q12.1; Serping1 (mouse) mapping to 2 D.

## SOURCE

C1INH (H-300) is a rabbit polyclonal antibody raised against amino acids 151-450 mapping within an internal region of C1INH of human origin.

## PRODUCT

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

## STORAGE

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

## APPLICATIONS

C1INH (H-300) is recommended for detection of C1INH of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500)), immunohistochemistry (including paraffin-embedded sections) (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 (h): sc-45608, C1INH siRNA (m): sc-45609, C1INH shRNA Plasmid (h): sc-45608-SH, C1INH shRNA Plasmid (m): sc-45609-SH, C1INH shRNA (h) Lentiviral Particles: sc-45608-V and C1INH shRNA (m) Lentiviral Particles: sc-45609-V.

Molecular Weight of C1INH: 55 kDa.

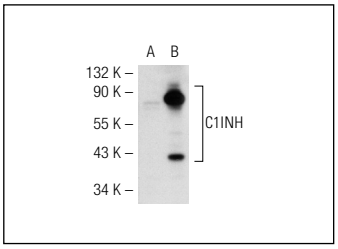
Molecular Weight of glycosylated C1INH: 75-105 kDa.

Positive Controls: C1INH (m): 293T Lysate: sc-126534 or rat liver extract: sc-2395.

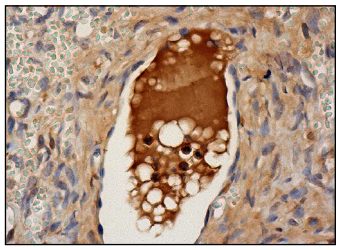
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA




C1INH (H-300): sc-67150. Western blot analysis of C1INH expression in non-transfected: sc-117752 (**A**) and mouse C1INH transfected: sc-126534 (**B**) 293T whole cell lysates.



C1INH (H-300): sc-67150. Immunoperoxidase staining of formalin fixed, paraffin-embedded human blood vessel tissue showing plasma staining.

## SELECT PRODUCT CITATIONS


1. Luo, C., et al. 2012. Expression of complement components and regulators by different subtypes of bone marrow-derived macrophages. Inflammation 35: 1448-1461.
2. Honda-Ogawa, M., et al. 2013. Cysteine proteinase from streptococcus pyogenes enables evasion of innate immunity via degradation of complement factors. J. Biol. Chem. 288: 15854-15864.


## 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.