**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**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

C1INH (B-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 215-249 within an internal region of C1INH of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

C1INH (B-11) is available conjugated to agarose (sc-377062 AC), 500 µg/0.25 ml agarose in 1 ml, for IIF; to HRP (sc-377062 HRP), 200 µg/ml, for WB, IHCP and ELISA; to either phycocyanin (sc-377062 PE), fluorescein (sc-377062 FITC), Alexa Fluor® 488 (sc-377062 AF488), Alexa Fluor® 546 (sc-377062 AF546), Alexa Fluor® 594 (sc-377062 AF594) or Alexa Fluor® 647 (sc-377062 AF647), 200 µg/ml, for WB (RGB), IF, IHCP and FCM; and to either Alexa Fluor® 680 (sc-377062 AF680) or Alexa Fluor® 790 (sc-377062 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-377062 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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**APPLICATIONS**

C1INH (B-11) is recommended for detection of C1INH of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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: Hep G2 cell lysate: sc-2227, rat liver extract: sc-2395 or mouse liver extract: sc-2256.

**DATA**

C1INH (B-11): sc-377062. Western blot analysis of C1INH expression in Hep G2 (A), HEK293 (B) and THP-1 (C) whole cell lysates and mouse liver (D) and rat liver (E) tissue extracts.

C1INH (B-11): sc-377062. Immunoperoxidase staining of formalin fixed, paraffin-embedded human adrenal gland tissue showing cytoplasmic staining of glandular cells.

**SELECT PRODUCT CITATIONS**


**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.

**PROTOCOLS**

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