SANTA CRUZ BIOTECHNOLOGY, INC.

C2 (H-300): sc-134639

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The complement component proteins: C2, C3, C4, and C5 are potent anaphylatoxins that are released during complement activation. Binding of these proteins to their respective G protein-coupled receptors induces proinflammatory events such as cellular degranulation, smooth muscle contraction, arachidonic acid metabolism, cytokine release, leukocyte activation and cellular chemotaxis. C2 deficiency (C2D) is the most common deficiency of the classical complement pathway and is mostly found in patients with autoimmune disease or susceptibility to bacterial infections. The N-terminal extracellular domain 1 of complement C2 receptor inhibitory trispanning, or CRIT, binds to C2 and specifically interacts with the C2a fragment. In doing so, CRIT blocks C2 cleavage and also prevents the classical pathway of C3 convertase formation.

REFERENCES

1. Manderson, A.P., et al. 2001. Continual low-level activation of the classical complement pathway. J. Exp. Med. 194: 747-756.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 217000. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: C2 (human) mapping to 6p21.33; C2 (mouse) mapping to 17 B1.

SOURCE

C2 (H-300) is a rabbit polyclonal antibody raised against amino acids 204-503 mapping within an internal region of C2 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.

APPLICATIONS

C2 (H-300) is recommended for detection of C2 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

C2 (H-300) is also recommended for detection of C2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for C2 siRNA (h): sc-95541, C2 siRNA (m): sc-141850, C2 shRNA Plasmid (h): sc-95541-SH, C2 shRNA Plasmid (m): sc-141850-SH, C2 shRNA (h) Lentiviral Particles: sc-95541-V and C2 shRNA (m) Lentiviral Particles: sc-141850-V.

Molecular Weight of C2: 85 kDa.

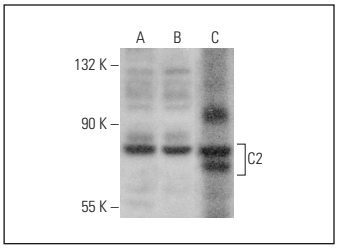
Molecular Weight of glycosylated C2: 102 kDa.

Positive Controls: HEK293 whole cell lysate: sc-45136, Raji whole cell lysate: sc-364236 or mouse liver extract: sc-2256.

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.

DATA



C2 (H-300): sc-134639. Western blot analysis of C2 expression in HEK293 (**A**) and Raji (**B**) whole cell lysates and mouse liver tissue extract (**C**).

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 or our catalog for detailed protocols and support products.