SANTA CRUZ BIOTECHNOLOGY, INC.

C8γ (H-10): sc-515150

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The complement cascade is a multi-protein system that functions to clear pathogens from an infected host. Part of the innate (unchanging) immune system, the complement cascade consists of proteins and inactive zymogens that are present in blood and are stimulated by one of several triggers. Once stimulated, the cascade relays amplified responses throughout the body, ultimately activating the cell-killing membrane attack complex which can insert itself into the cell membrane and cause the cell to lyse. C8γ (complement component 8, γ polypeptide), also known as C8C or C8G, is one of three polypeptides (along with C8 and C8) that constitutes C8, a component of the complement system. Consisting of 202 amino acids, C8γ is a secreted protein that is able to bind retinol and belongs to the lipocalin family and calycin superfamily.

REFERENCES

1. Hunt, L.T., et al. 1987. The homology of complement factor C8 γ chain and α-1-microglobulin. Biochem. Biophys. Res. Commun. 149: 282-288.
2. Haefliger, J.A., et al. 1987. Structural homology of human complement component C8 γ and plasma protein HC: identity of the cysteine bond pattern. Biochem. Biophys. Res. Commun. 149: 750-754.
3. Ng, S.C., et al. 1987. The eighth component of human complement: evidence that it is an oligomeric serum protein assembled from products of three different genes. Biochemistry 26: 5229-5233.
4. Kaufman, K.M., et al. 1989. Chromosomal assignment of genes encoding the α, β, and γ subunits of human complement protein C8: identification of a close physical linkage between the α and the β loci. Genomics 5: 475-480.

CHROMOSOMAL LOCATION

Genetic locus: C8G (human) mapping to 9q34.3.

SOURCE

C8γ (H-10) is a mouse monoclonal antibody raised against amino acids 138-202 mapping at the C-terminus of C8γ of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

C8γ (H-10) is available conjugated to agarose (sc-515150 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515150 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515150 PE), fluorescein (sc-515150 FITC), Alexa Fluor® 488 (sc-515150 AF488), Alexa Fluor® 546 (sc-515150 AF546), Alexa Fluor® 594 (sc-515150 AF594) or Alexa Fluor® 647 (sc-515150 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515150 AF680) or Alexa Fluor® 790 (sc-515150 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

C8γ (H-10) is recommended for detection of C8γ of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for C8γ siRNA (h): sc-92621, C8γ shRNA Plasmid (h): sc-92621-SH and C8γ shRNA (h) Lentiviral Particles: sc-92621-V.

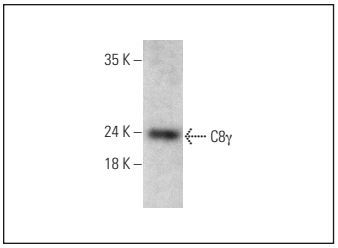
Molecular Weight of C8γ: 22 kDa.

Positive Controls: human liver extract: sc-363766 or human prostate extract: sc-363774.

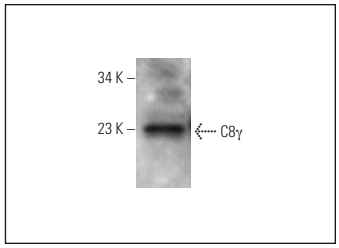
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



C8γ (H-10): sc-515150. Western blot analysis of C8γ expression in human liver tissue extract.



C8γ (H-10): sc-515150. Western blot analysis of C8γ expression in human prostate tissue extract.

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.