# C6 (H-243): sc-68904



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. C6 (complement component C6) is a 934 amino acid secreted protein that plays a role in the complement cascade, specifically functioning as part of the membrane attack complex. Expressed as two transcript variants, C6 contains one EGFlike domain, one LDL-receptor class A domain, one MACPF domain, two Sushi domains and three TSP type-1 domains. C6 deficiency is correlated with a higher risk of bacterial infection, further supporting the importance of C6 in the innate immune system.

# **REFERENCES**

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- 3. Hobart, M.J., Fernie, B. and DiScipio, R.G. 1993. Structure of the human C6 gene. Biochemistry 32: 6198-6205.
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- Qian, Z., Lee, C.Y., Murata, K., Liu, J., Fox-Talbot, K., Wasowska, B.A. and Baldwin, W.M. 2006. Antibody and complement mediated injury in transplants following sensitization by allogeneic blood transfusion. Transplantation 82: 857-864.

# **CHROMOSOMAL LOCATION**

Genetic locus: C6 (human) mapping to 5p13.1.

## SOURCE

C6 (H-243) is a rabbit polyclonal antibody raised against amino acids 118-360 mapping near the N-terminus of C6 of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **APPLICATIONS**

C6 (H-243) is recommended for detection of C6 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 C6 siRNA (h): sc-72769, C6 shRNA Plasmid (h): sc-72769-SH and C6 shRNA (h) Lentiviral Particles: sc-72769-V.

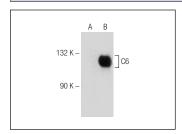
Molecular Weight of C6: 120 kDa.

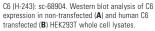
Positive Controls: human platelet extract: sc-363773, human C6 transfected HEK293T whole cell lysate or human plasma extract: sc-364374.

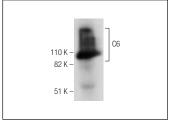
## **RECOMMENDED SECONDARY REAGENTS**

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**







 ${\rm C6}~(\mbox{H-}243)\!\!:sc\mbox{-}68904.$  Western blot analysis of  ${\rm C6}$  in human plasma.

## **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.



Try **C6 (D-8):** sc-390735 or **C6 (B-3):** sc-390716, our highly recommended monoclonal alternatives to C6 (H-243).