

# C9 (D-18): sc-54579

## BACKGROUND

C9 is a plasma protein synthesized in the liver and monocytes consisting of a single polypeptide chain. C9 is a part of the membrane attack complex (MAC), an important component of the immune system. The MAC forms upon complement system activation by invading pathogenic bacteria and consists of the four major complement proteins: C5b, C6, C7 and C8. These complement proteins bind to the outer surface of the plasma membrane of the invading cell. C9 binds to the membrane-associated C5b-8 protein, which leads to the circular polymerization of 12-18 C9 molecules. These polymerized C9 molecules form a ring structure in the membrane. Molecules can then diffuse freely through this transmembrane channel, causing cell lysis and destruction of the invading bacterial cell.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: C9 (human) mapping to 5p13.1.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## SOURCE

C9 (D-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of C9 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.

Blocking peptide available for competition studies, sc-54579 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

C9 (D-18) is recommended for detection of complement component C9 precursor and mature C9b of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 C9 siRNA (h): sc-62032, C9 shRNA Plasmid (h): sc-62032-SH and C9 shRNA (h) Lentiviral Particles: sc-62032-V.

Molecular Weight of C9: 71 kDa.

Positive Controls: human plasma.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **C9 (E-3): sc-390000** or **C9 (64E9): sc-69761**, our highly recommended monoclonal alternatives to C9 (D-18).