



## C3d (6F6): sc-80579

### 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, C3aR, C1R and C5aR, induces proinflammatory events such as cellular degranulation, smooth muscle contraction, arachidonic acid metabolism, cytokine release, leukocyte activation and cellular chemotaxis. C3d is a terminal degradation product of C3 that plays an important role in modulation of the adaptive immune response through the interaction with complement receptor type 2 (CR2). CR2 is important in the switched-isotype, high affinity and memory humoral immune responses to T-dependent foreign antigens, as well as in the development of the natural antibody repertoire. This pH- and ionic strength-dependent association of C3d with CR2 represents a link between innate and adaptive immunity.

### REFERENCES

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### RESEARCH USE

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

### CHROMOSOMAL LOCATION

Genetic locus: C3 (human) mapping to 19p13.3-p13.2.

### SOURCE

C3d (6F6) is a mouse monoclonal antibody raised against full length native C3 of human origin.

### PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### APPLICATIONS

C3d (6F6) is recommended for detection of C3d of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of C3d: 187 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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.

### 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.