CD21 (A-3): sc-13135

**BACKGROUND**

CD21 (also known as complement receptor (CR) type 2) is a type I integral membrane glycoprotein that serves as a receptor for the C3d complement fragment and for the Epstein-Barr virus. It plays a role in B cell activation and proliferation and undergoes phosphorylation after B cell activation with phorbol esters. CD21 is expressed on mature B cells, follicular dendritic cells, pharyngeal and cervical epithelial cells and a subset of thymocytes. The adaptive immune response is tightly regulated to limit responding cells in an antigen-specific manner. On B cells, co-receptors CD21/CD19 modulate the strength of B cell Ag receptor (BCR) signals, thereby influencing cell fate. CD21 is normally expressed during the immature and mature stages of B cell development. In association with CD19, CR21 plays an important role in enhancing mature B cell responses to foreign antigens.

**CHROMOSOMAL LOCATION**

Genetic locus: CR2 (human) mapping to 1q32.2; Ctr2 (mouse) mapping to 1H6.2.

**SOURCE**

CD21 (A-3) is a mouse monoclonal antibody raised against amino acids 21-260 of CD21 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2b, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CD21 (A-3) is available conjugated to agarose (sc-13135 AC), 500 µg/0.25 ml agarose in 1 ml, for IP, to HRP (sc-13135 HRP), 200 µg/ml, for WB, IHC (P) and ELISA; to either phycoerythrin (sc-13135 PE), fluorescein (sc-13135 FITC), Alexa Fluor® 488 (sc-13135 AF488), Alexa Fluor® 546 (sc-13135 AF546), Alexa Fluor® 594 (sc-13135 AF594) or Alexa Fluor® 647 (sc-13135 AF647), 200 µg/ml, for WB (RGB), IF, IHC (P) and FCM; and to either Alexa Fluor® 568 (sc-13135 AF568) or Alexa Fluor® 790 (sc-13135 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

**APPLICATIONS**

CD21 (A-3) is recommended for detection of CD21 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:500), 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).


Molecular Weight of CD21: 145 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204, F9 cell lysate: sc-2245 or RAW 264.7 whole cell lysate: sc-2211.

**STORAGE**

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

**DATA**

**SELECT PRODUCT CITATIONS**


**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.