

## 36-2116: Anti-CD21 (Mature B-Cell & Follicular Dendritic Cell Marker) Monoclonal Antibody (Clone: CR2/2754)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	CR2/2754
<b>Application :</b>	ELISA, FACS, WB, IF, IHC
<b>Reactivity :</b>	Human
<b>Gene :</b>	CR2
<b>Gene ID :</b>	1380
<b>Uniprot ID :</b>	P20023
<b>Alternative Name :</b>	CD21; Complement C3d receptor (C3DR); Complement Receptor type 2 (CR2); CVID7; EBV receptor; EBV-R; Epstein-Barr virus receptor; EVBR; SLEB9
<b>Isotype :</b>	Mouse IgG1, kappa
<b>Immunogen Information :</b>	Recombinant fragment (around aa 142-240) of human CR2 (CD21) protein (exact sequence is proprietary)

### Description

Recognizes a protein of 140kDa, which is identified as the complement receptor 2 (CR2) or CD21. This protein is expressed strongly on mature B cells, follicular dendritic cells and weakly on immature thymocytes and T lymphocytes. In B-cell ontogeny, CD21 appears after the pre-B-stage, is maintained during peripheral B-cell development and is lost upon terminal differentiation into plasma cells. CD21 expression is also gradually lost after stimulation of B cells in vitro. CD21 functions as receptor for C3d, C3dg and iC3b Complement components, for EBV and for IFN $\alpha$ . CD21 binds to CD23 and associates with CD19, CD81 and Leu13 to form a large signal-transduction complex involved in B cell activation.

### Product Info

<b>Amount :</b>	20 $\mu$ g / 100 $\mu$ g
<b>Content :</b>	200 $\mu$ g/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
<b>Storage condition :</b>	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

### Application Note

ELISA (For coating, order antibody without BSA); Flow Cytometry (1-2 $\mu$ g/million cells); Cells are fixed using 3% PFA.; Western Blot (1-2 $\mu$ g/ml); Immunofluorescence (1-2 $\mu$ g/ml); Immunohistochemistry (Formalin-fixed) (1-2 $\mu$ g/ml for 30 min at RT), (Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),

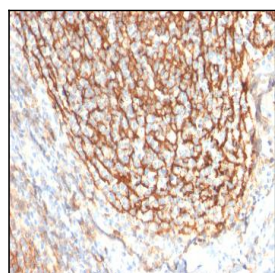


Fig. 1: Formalin-fixed, paraffin-embedded human Tonsil Dendritic stained with CD21-Monospecific Mouse Monoclonal Antibody (CR2/2754).

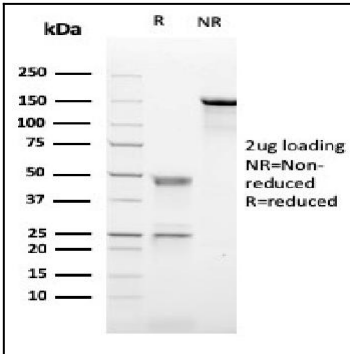


Fig. 2: SDS-PAGE Analysis Purified CD21-Monospecific Mouse Monoclonal Antibody (CR2/2754). Confirmation of Integrity and Purity of Antibody.

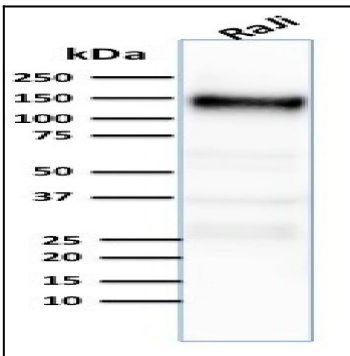


Fig. 3: Western Blot Analysis of human Raji cell lysate using CD21-Monospecific Mouse Monoclonal Antibody (CR2/2754).

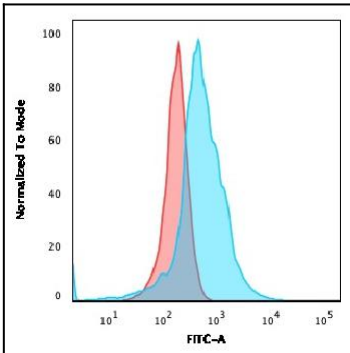


Fig. 4: Flow Cytometric Analysis of PFA-fixed MOLT4 cells. CD21-Monospecific Mouse Monoclonal Antibody (CR2/2754) followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

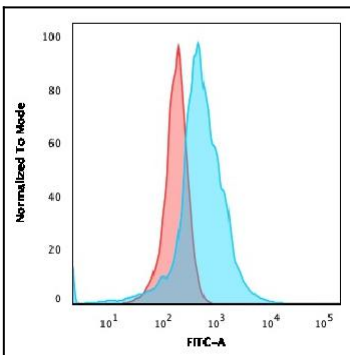


Fig. 5: Immunofluorescence staining of PFA-fixed MOLT4 cells using CD21-Monospecific Mouse Monoclonal Antibody (CR2/2754) followed by goat anti-Mouse IgG conjugated to CF488 (green). Nuclei are stained with Reddot.

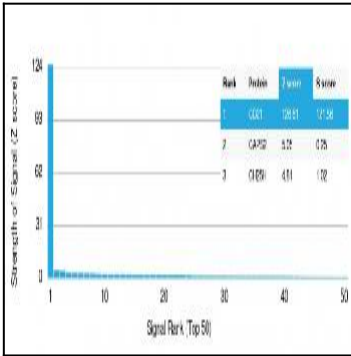


Fig. 6: Analysis of Protein Array containing more than 19,000 full-length human proteins using CD21-Monospecific Mouse Monoclonal Antibody (CR2/2754) Z- and S-Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.