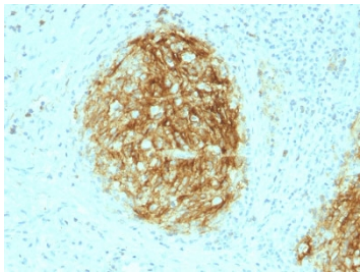
CD21 Antibody [clone CR2/1953] (V3778)

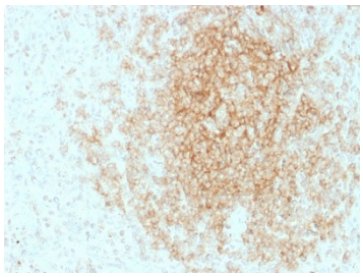
Catalog No.	Formulation	Size
V3778-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3778-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3778SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

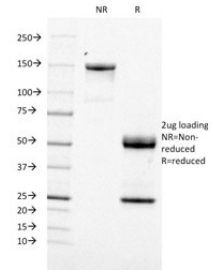
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	CR2/1953
Purity	Protein G affinity chromatography
UniProt	P20023
Localization	Cell surface
Applications	ELISA (order BSA/sodium Azide-free Format For Coating) : Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This CD21 antibody is available for research use only.



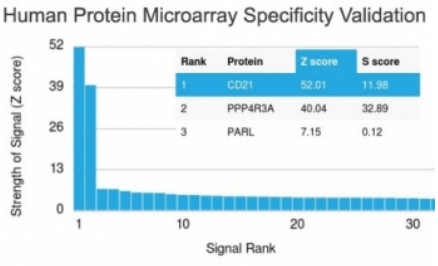
CD21 Antibody FDC Tumor IHC. Immunohistochemistry of Complement Receptor 2 / CD21 in FFPE human follicular dendritic cell sarcoma tissue using CD21 antibody, clone CR2/1953. HRP-DAB brown staining highlights tumor cells forming a compact nodular network with strong membranous and dendritic cytoplasmic signal, consistent with follicular dendritic cell origin, while surrounding stromal elements show minimal staining and nuclei are counterstained blue. Heat induced epitope retrieval was performed by boiling tissue sections in pH 6 10 mM citrate buffer for 10-20 min followed by cooling at RT prior to staining.



CD21 Antibody B-cell Zone IHC. Immunohistochemistry testing of FFPE human tonsil tissue with CD21 antibody (clone CR2/1953). HIER: boil tissue sections in pH6, 10mM citrate buffer, for 10-20 min followed by cooling at RT for 20 min.



SDS-PAGE analysis of purified, BSA-free CD21 antibody (clone CR2/1953) as confirmation of integrity and purity.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using CD21 antibody (clone CR2/1953). These results demonstrate the foremost specificity of the CR2/1953 mAb.
Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.

Description

Recognizes a protein of 140kDa, which is identified as the complement receptor 2 (CR2)/CD21. Its epitope is located in 5-8 short consensus repeats (SCRs). This mAb is highly specific to CR2 and shows no cross-reaction with CR1. 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 IFNalpha. CD21 binds to CD23 and associates with CD19, CD81 and Leu13 to form a large signal-transduction complex involved in B cell activation.

For a validated reference of CD21 expression across B cells and follicular dendritic cell networks, see CD21 antibody clone CR2/2754 with supporting multi-application data.

Application Notes

Optimal dilution of the CD21 antibody should be determined by the researcher.

Immunogen

A portion of amino acids 44-196 were used as the immunogen for the CD21 antibody.

Storage

Store the CD21 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).