Human CD21 Antibody

Monoclonal Mouse IgG_1 Clone # 544408

Catalog Number: MAB4909

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CD21 in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG_1 Clone # 544408
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human CD21 Ile21-Arg971 Accession # P20023
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

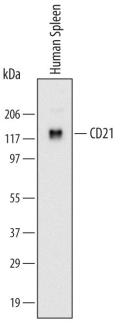
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	2 µg/mL	See Below
Flow Cytometry	0.25 µg/10^6 cells	See Below

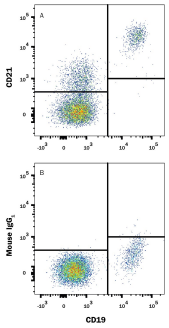
DATA

Western Blot



Detection of Human CD21 by Western Blot. Western blot shows lysates of human spleen tissue. PVDF Membrane was probed with 2 µg/mL of Mouse Anti-Human CD21 Monoclonal Antibody (Catalog # MAB4909) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for CD21 at approximately 145 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Flow Cytometry



Detection of CD21 in Human PBMCs by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs) were stained with Mouse Anti-Human CD19 PE-conjugated Monoclonal Antibody (Catalog # FAB4867P) and either (A) Mouse Anti-Human CD21 Monoclonal Antibody (Catalog # MAB4909) or (B) Mouse IgG_1 Isotype Control (Catalog # MAB002) followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

CD21 (also called EBV receptor or CR2) is a 145 kDa member of the RCA (receptors of complement activation) family of proteins. It is expressed on T cells, B cells, and follicular dendritic cells. On the B cell surface, it combines with the BCR and CD19 to form a B cell activating complex. Mature human CD21 is 1013 amino acids (aa) in length. It is a type I transmembrane (TM) protein that contains a 951 aa extracellular domain (ECD) (aa 21-971) and a short 34 aa cytoplasmic tail. The ECD exhibits fifteen 60 aa SUSHI repeats. Soluble CD21 can be generated by cleavage near the TM domain. One potential splice variant shows a deletion of aa 847-908, while another shows an insertion of 59 aa after Lys659. The ECD of human CD21 shares 71% aa identity with mouse CD21 ECD.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956