

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CD21 in direct ELISA.
Source	Monoclonal Mouse IgG ₁ Clone # 544411
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 either lyophilized or as a 0.2 µm filtered solution in PBS.

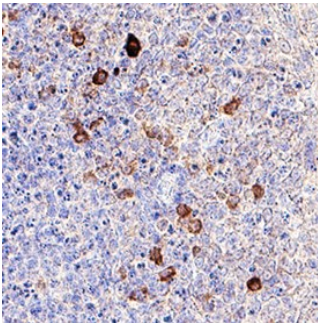
APPLICATIONS

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
Immunohistochemistry	5-25 µg/mL	Immersion fixed paraffin-embedded sections of Human Tonsil

DATA

Immunohistochemistry



Detection of CD21 in Human Tonsil. CD21 was detected in immersion fixed paraffin-embedded sections of Human Tonsil using Mouse Anti-Human CD21 Monoclonal Antibody (Catalog # MAB49091) at 5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cell membrane in lymphocytes. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

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. <ul style="list-style-type: none"> • 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.