EXBIO Antibodies

PRODUCT DATA SHEET

T7-306-T100

Monoclonal Antibody to CD21 PE-Cy™7 conjugated (100 tests)

Clone:	LT21
Isotype:	Mouse IgG1
Specificity:	The antibody LT21 reacts with CD21 (CR2), a 145 kDa transmembrane glycoprotein (complement C3d receptor - C3dR) expressed on B lymphocytes, follicular dendritic cells, some epithelial cells and a subsets of T lymphocytes. It is not expressed on immature B cells. HLDA VI; WS Code B CD21.1
Regulatory Status:	RUO
Immunogen:	IM9 human B-lymphoblastoid cell line
Species Reactivity:	Human, Porcine, Bovine, Canine (Dog)
Preparation:	The purified antibody is conjugated with tandem dye PE-Cy™7 under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Storage Buffer:	The reagent is provided in stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
Storage / Stability:	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label.
Usage:	The reagent is designed for Flow Cytometry analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	CD21 (complement receptor 2, CR2) binds C3 complement fragments, especially its breakdown fragments, which remain covalently attached to complement activating surfaces or antigen. CD21 has important roles in uptake and retention of immunocomplexes, survival of memory B cells and in development and maintenance of the humoral response to T-dependent antigens. CD21 also serves as a key receptor for Epstein-Barr virus binding and is involved in targeting prions to folicular dendritic cells and expediting neuroinvasion following peripheral exposure to prions. A soluble form of the CD21 (sCD21) is shed from the lymphocyte surface and retains its ability to bind respective ligands.

For laboratory research only, not for drug, diagnostic or other use.

EXBIO Praha | Nad Safinou II 341 | 252 50 Vestec u Prahy | Czech Republic
Tel: +420 261 090 666 | Fax: +420 261 090 660 | orders@exbio.cz | www.exbio.cz

References:

*Roozendaal R, Carroll MC: Complement receptors CD21 and CD35 in humoral immunity. Immunol Rev. 2007 Oct;219:157-66.

*Twohig J, Kulik L, Haluszczak C, Reuter J, Rossbach A, Bull M, Holers VM, Marchbank KJ: Defective B cell ontogeny and immune response in human complement receptor 2 (CR2, CD21) transgenic mice is partially recovered in the absence of C3. Mol Immunol. 2007 Jul;44(13):3434-44.

*Kasprzak A, Spachacz R, Wachowiak J, Stefanska K, Zabel M: Epstein-Barr virus (EBV) infection in B-cell non-Hodgkin's lymphomas in children: virus latency and its correlation with CD21 and CD23 molecules. Folia Histochem Cytobiol. 2007;45(3):169-79.

*Zabel MD, Heikenwalder M, Prinz M, Arrighi I, Schwarz P, Kranich J, von Teichman A, Haas KM, Zeller N, Tedder TF, Weis JH, Aguzzi A: Stromal complement receptor CD21/35 facilitates lymphoid prion colonization and pathogenesis. J Immunol. 2007 Nov 1;179(9):6144-52.

*Singh A, Blank M, Shoenfeld Y, Illges H: Antiphospholipid syndrome patients display reduced titers of soluble CD21 in their sera irrespective of circulating anti-beta2-glycoprotein-I autoantibodies. Rheumatol Int. 2008 Jan 3

*Leukocyte Typing VI., Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).

*Faldyna M, Samankova P, Leva L, Cerny J, Oujezdska J, Rehakova Z, Sinkora J: Cross-reactive anti-human monoclonal antibodies as a tool for B-cell identification in dogs and pigs. Vet Immunol Immunopathol. 2007 Sep 15;119(1-2):56-62.

*Filatov AV, Krotov GI, Zgoda VG, Volkov Y: Fluorescent immunoprecipitation analysis of cell surface proteins: a methodology compatible with mass-spectrometry. J Immunol Methods. 2007 Jan 30;319(1-2):21-33.

EXBIO Praha | Nad Safinou II 341 | 252 50 Vestec u Prahy | Czech Republic
Tel: +420 261 090 666 | Fax: +420 261 090 660 | orders@exbio.cz | www.exbio.cz