abcam

ab328601

PE Anti-CD21 antibody [LT21]

Key facts

Isotype	IgG1
Host species	Mouse
Conjugation	PE
Excitation/Emission	Ex: 480;565nm, Em: 578nm
Storage buffer	pH: 7.4 Preservative: 0.1% Sodium azide Constituents: PBS, 0.2% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	IM9 human B-lymphoblastoid cell line. Database link P20023
Clone number	LT21
Purification technique	Size-exclusion chromatography
Specificity	The antibody LT21 reacts with an extracellular epitope of 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.
Light chain type	kappa

Reactivity data

Flow Cyt

Tested

Species	Human

Dilution info	-
Notes	Flow cytometry: The reagent is designed for analysis of human blood cells using 20 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.

Target data

See full target information CR2

Function	Serves as a receptor for various ligands including complement component CD3d, HNRNPU OR IFNA1 (PubMed:1849076, PubMed:21527715, PubMed:7753047). When C3d is bound to antigens, attaches to C3d on B-cell surface and thereby facilitates the recognition and uptake of antigens by B-cells (PubMed:21527715). This interaction enhances B-cell activation and subsequent immune responses. Forms a complex with several partners on the surface of B-cells including CD19, FCRL5 and CD81, to form the B-cell coreceptor complex that plays a crucial role in B-cell activation and signaling (PubMed:1383329, PubMed:30107486). Also induces specific intracellular signaling separately from the BCR and CD19 by activating the tyrosine kinase SRC, which then phosphorylates nucleolin/NCL and triggers AKT and GSK3 kinase activities in a SYK/CD19-independent manner (PubMed:12938232). Acts as a ligand for CD23 (FcepsilonRII), a low-affinity receptor for IgE, which is expressed on B-cells and other immune cells, and thus participates in the regulation of IgE production (PubMed:1386409). (Microbial infection) Acts as a receptor for Epstein-Barr virus.

Storage

Shipped at conditions	Ambient - Can Ship with Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

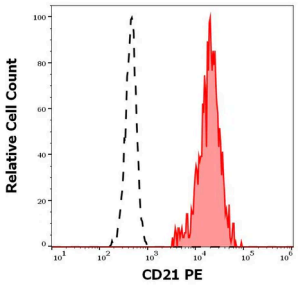
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

---

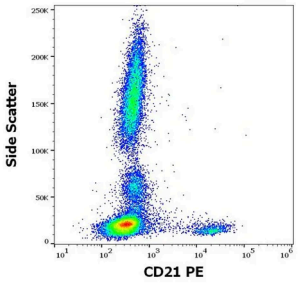
2 product images



Flow Cytometry - PE Anti-CD21 antibody [LT21] (ab328601)

CD21 Flow Cytometry staining of human peripheral whole blood using mouse Anti-CD21 antibody

Separation of human CD21 positive lymphocytes (red-filled) from neutrophil granulocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD21 (LT21) PE antibody (concentration in sample 1.67 µg/ml).



Flow Cytometry - PE Anti-CD21 antibody [LT21] (ab328601)

CD21 Flow Cytometry staining of human peripheral whole blood using mouse Anti-CD21 antibody

Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD21 (LT21) PE antibody (concentration in sample 1.67 µg/ml).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.