PE/Fire™ 640 anti-human CD21 Antibody

Catalog# / Size	354937 / 25 tests 354938 / 100 tests
Clone	Bu32
Regulatory Status	RUO
Workshop	V CD21.4, VI CD21.5
Other Names	Complement C3d receptor (C3dR), complement receptor 2 (CR2), Epstein-Barr virus receptor
Isotype	Mouse IgG1, κ
Description	CD21 is a 145 kD transmembrane protein also known as complement C3d receptor (C3dR), complement receptor 2 (CR2), and Epstein-Barr virus receptor. CD21 is expressed on B cells, follicular dendritic cells, subsets of normal thymocytes and T cells, and some epithelial cells. CD21 is the receptor used by Epstein-Barr virus to infect B cells and is also the complement receptor for C3d. CD21 has also been shown to interact with a number of proteins, including CD23, CD19, annexin VI, CD81, iC3b, complement receptor 1 (CR1, CD35), and interferon-alpha 1 (IFN-α1).

Product Details

Verified Reactivity	Human
Reported Reactivity	African Green, Baboon, Cynomolgus
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with PE/Fire™ 640 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze**.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. * PE/Fire™ 640 has a maximum excitation of 566 nm and a maximum emission of 639 nm.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen sections[4].

Application References **(PubMed link indicates BioLegend citation)**	1. Björck P, *et al.* 1993. *Eur. J. Immunol.* 23:1771. 2. Frémeaux-Bacchi V, *et al.* 1996. *Eur. J. Immunol.* 26:1497. 3. Ling NR, *et al.* 1995. *Clin. Exp. Immunol.* 101:369. 4. Wang, C, *et al.* 2011. *BMC Immunol.* 12:53. (IHC)
RRID	AB_3720555 (BioLegend Cat. No. 354937) AB_3720555 (BioLegend Cat. No. 354938)

Antigen Details

Structure	Transmembrane protein, multiple SUSHI domains, approximate molecular weight 145 kD
Distribution	Expressed on B cells, follicular dendritic cells, subsets of normal thymocytes and T cells, some epithelial cells
Function	Epstein-Barr virus receptor on B cells used for infection
Interaction	CD23, CD19, complement component 3, annexin VI, CD81, iC3b, complement receptor 1, interferon alpha 1
Ligand/Receptor	C3d, EBV
Cell Type	B cells, Dendritic cells, Epithelial cells, T cells, Thymocytes
Biology Area	Cell Biology, Complement, Costimulatory Molecules, Immunology, Innate Immunity, Neuroinflammation, Neuroscience
Molecular Family	CD Molecules
Antigen References	1. Kishimoto T, Eds. 1997. Leukocyte Typing VI. Garland Publishing Inc. 2. Moore MD, *et al.* 1987. *Proc. Natl. Acad. Sci. USA* 84:9194. 3. Szakonyi G, *et al.* 2001. *Science* 292:1725. 4. Weis JJ, *et al.* 1984. *Proc. Natl. Acad. Sci. USA* 81:881.
Gene ID	1380

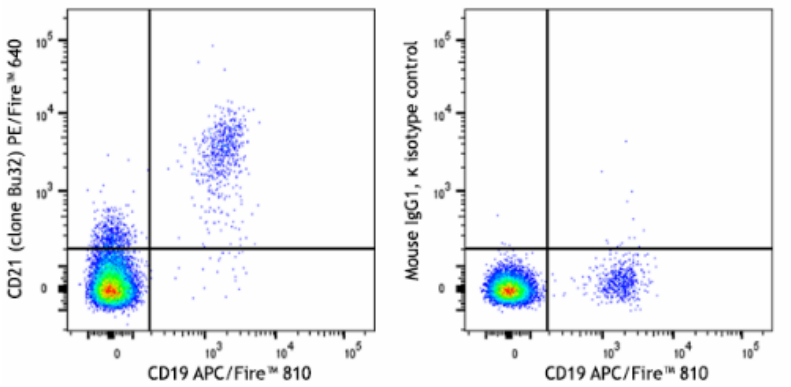
Related Protocols

- Cell Surface Flow Cytometry Staining Protocol

Other Formats

APC/Cyanine7 anti-human CD21, TotalSeq™-D0181 anti-human CD21, TotalSeq™-Bn0181 anti-human CD21, Alexa Fluor® 594 anti-human CD21, APC/Fire™ 750 anti-human CD21, Spark Violet™ 423 anti-human CD21, PE anti-human CD21, PerCP/Cyanine5.5 anti-human CD21, GMP APC/Fire™ 750 anti-human CD21, Spark Red™ 718 anti-human CD21 (Flexi-Fluor™), Biotin anti-human CD21, Alexa Fluor® 700 anti-human CD21, TotalSeq™-A0181 anti-human CD21, TotalSeq™-C0181 anti-human CD21, Purified anti-human CD21, APC anti-human CD21, FITC anti-human CD21, PE/Fire™ 640 anti-human CD21, TotalSeq™-B0181 anti-human CD21 Antibody, PE/Cyanine7 anti-human CD21, Spark PLUS UV395™ anti-human CD21 (Flexi-Fluor™), PE/Dazzle™ 594 anti-human CD21

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD19 (clone HIB19) APC/Fire™ 810 and anti-human CD21 (clone Bu32) PE/Fire™ 640 (left) or mouse IgG1, κ PE/Fire™ 640 isotype control (right).

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