

IL-21 Monoclonal Antibody (eBio3A3-N2 (3A3-N2)), eFluor™ 660, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), eFluor™ 660, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBio3A3-N2 (3A3-N2)
Conjugate	eFluor™ 660
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin, 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_10598202

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.125 µg)/test	5 Publications

Product Specific Information

Description: The monoclonal antibody eBio3A3-N2 reacts with human IL-21, a potent stimulator of NK and cytolytic T cells. IL-21 is a 131 amino acid protein most closely related to IL-2 and IL-15. Expression is found in CD4+ cells upon activation. In addition to its effect on NK cells, IL-21 stimulates proliferation of B-cell stimulated by crosslinking of the CD40 antigen and stimulates the proliferation of bone marrow progenitor cells and the expression of the NK-cell marker CD56 in the presence of IL-15.

Applications Reported: This eBio3A3-N2 (3A3-N2) antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested: This eBio3A3-N2 (3A3-N2) antibody has been pre-titrated and tested by intracellular staining and flow cytometric analysis of restimulated, Th17-polarized normal human peripheral blood cells. This can be used at 5 µL (0.125 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test.

Staining for IL-21 has shown donor variability. stimulation times may vary depending on the donor and should be optimized. Increased staining levels have been observed on Th17-polarized normal human peripheral blood cells.

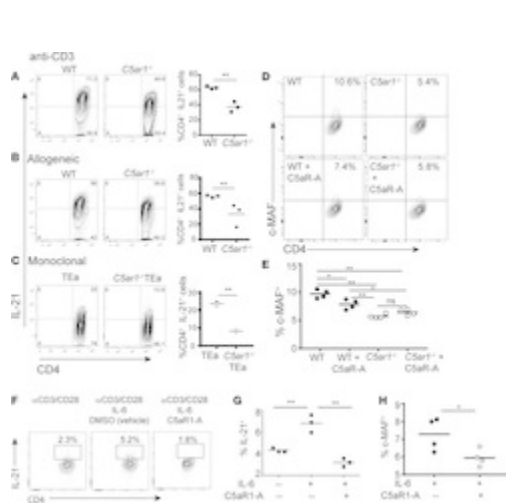
eFluor® 660 is a replacement for Alexa Fluor® 647. eFluor® 660 emits at 659 nm and is excited with the red laser (633 nm).

Please make sure that your instrument is capable of detecting this fluorochrome.

Excitation: 633-647 nm; Emission: 668 nm; Laser: Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

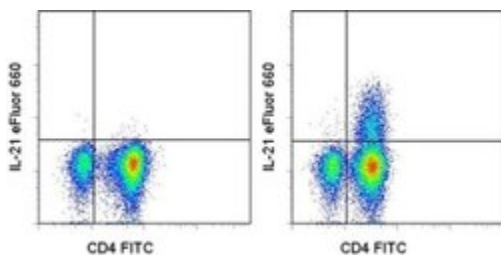
Advanced Verification Data



IL-21 Antibody (50-7219-42)

Figure 6 T cell-expressed C5aR1 regulates *in vitro* induction of IL-21-producing CD4+ T cells. Representative flow plots for IL-21-producing CD4+ T cells and summarized data of naive B6 CD62LhiCD44loCD4+ T cells from WT and C5ar1-/- mice cultured with aCD3/CD28 (A) or allogeneic BALB/c splenic APCs (B) under Tfh cell-inducing conditions for 5 days (n = 3 per group, repeated twice with similar results). (C) Representative flow plots for IL-21-producing CD4+ T cells and summarized data of naive B6 CD62LhiCD44loCD4+ T cells from WT TEa or C5ar1-/- TEa TCR-transgenic mice cultured with (bx)dF1 APCs under Tfh cell-inducing conditions for 5 days (n = 3/group, repeated once with similar results). (D and E) Representative flow plots (D) and quantitation (E) for c-MAF expression from WT and C5ar1-/- mice cultured with aCD3/CD28 with or without C5ar1-A for 5 days (n = 4/group, repeated twice with similar results). (F-H) Representative flow cytometry plots (F) and quantification (G) of IL-21 producers and quantitation of intracellular c-MAF (H) within human CD4+ T cells stimulated for 5 days under the conditions shown, with or without human C5aR1-A. n = 3-4/group. Each experiment shown is representative of at least 3 independent experiments for each set of studies. *P < 0.05, **P < 0.01 by Student's t test. Cell treatment validation info.

Product Images For IL-21 Monoclonal Antibody (eBio3A3-N2 (3A3-N2)), eFluor™ 660, eBioscience™



IL-21 Antibody (50-7219-42) in Flow

Intracellular staining of Th17-polarized normal human peripheral blood cells restimulated with monensin alone (left) or PMA/Ionomycin and monensin for 5 hours (right) with Anti-Human CD4 FITC (Product # 11-0049-42) and Anti-Human IL-21 eFluor® 660. Cells in the lymphocyte gate were used for analysis.

View more figures on thermofisher.com

5 References

Flow Cytometry (5)

European journal of medical research

IL-22 production of effector CD4⁺ T-cells is altered in SLE patients.

"50-7219 was used in Flow Cytometry to demonstrate that CD134+CD4+ T-cells are increased in the peripheral blood of patients with systemic lupus erythematosus as compared to healthy controls."

Authors: Dolff S, Scharpenberg C, Specker C, Kribben A, Witzke O, Wilde B

Species
Human

Dilution
Not Cited

Year
2019

JCI insight

C5aR1 regulates T follicular helper differentiation and chronic graft-versus-host disease bronchiolitis obliterans.

"Published figure using IL-21 monoclonal antibody (Product # 50-7219-42) in Flow Cytometry"

Authors: Verghese DA, Chun N, Paz K, Fribourg M, Woodruff TM, Flynn R, Hu Y, Xiong H, Zhang W, Yi Z, Du J, Blazar BR, Heeger PS

Species
Not Applicable

Dilution
Not Cited

Year
2018

[View more Flow references on thermofisher.com](#)

More applications with references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.