

Anti-Human IL-21-172Yb

Catalog: 3172011B

Package Size: 100 tests

Storage: Store product at 4°C. Do not freeze.

Reactivity: Rhesus

Clone: 3A3-N2

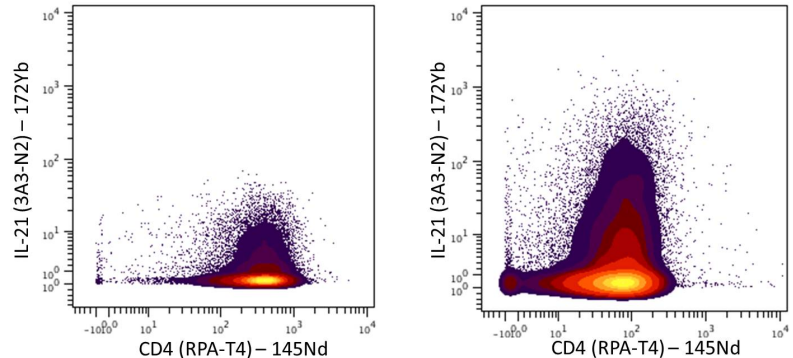
Isotype: Mouse IgG1

Formulation: Antibody stabilizer with 0.05% Sodium Azide

Technical Information

Validation: Each lot of conjugated antibody is quality control tested by CyTOF[®] analysis of stained cells using the appropriate positive and negative cell staining and/or activation controls.

Recommended Usage: The suggested use is 1 µl for up to 3 X 10⁶ live cells in 100 µl. It is recommended that the antibody be titrated for optimal performance for each of the desired applications.



Human Th17-polarized CD4+ T cells were incubated for 5 hours in media alone (left) or with PMA and Ionomycin (right) in the presence of monensin and brefeldin A. Cells were then fixed, permeabilized, and stained with 145Nd anti-CD4 (RPA-T4) and 172Yb anti-IL-21 (3A3-N2).

Description

IL-21 is a type I cytokine and a member of the family of cytokines, along with IL-2, IL-4, IL-7, IL-9 and IL-15, that utilize the common cytokine receptor gamma chain (γc) as part of their receptor complex. IL-21 is expressed predominantly by CD4+ T cells, and binds to the IL-21 receptor (IL-21R), expressed on lymphohematopoietic cells including NK cells, T cells, B cells, monocytes, macrophages and dendritic cells. Binding of IL-21 exerts a diverse array of biological effects including increased CD4+ and CD8+ T cell proliferation, augmented function of CD8+ T cells and NK cells, promotion of IL-17-secreting Th17 cells and enhancement of B cell activation and plasma cell differentiation. The effects of IL-21 on B cells is due partially to its autocrine activity on follicular helper T cells (TFH), CD4+ T cells that produce large amounts of IL-21 and are critical to the development and function of germinal centers. Furthermore, it is thought that IL-21 plays a role in the development of pathogenic autoantibodies in systemic lupus erythematosus (SLE) and rheumatoid arthritis (RA).

References

Bandura, D. R., et al. Mass Cytometry: Technique for Real Time Single Cell Multitarget Immunoassay Based on Inductively Coupled Plasma Time-of-Flight Mass Spectrometry. *Analytical Chemistry* 81:6813-6822, 2009.

Ornatsky, O. I., et al. **Highly Multiparametric Analysis by Mass Cytometry.** *J Immunol Methods* 361 (1-2):1-20, 2010.

For technical support visit fluidigm.com/support

North America +1 650 266 6100 | Toll-free: +1 866 358 4354 in the US | support.northamerica@fluidigm.com **Europe** +33 1 60 92 42 40 | support.europe@fluidigm.com

China (excluding Hong Kong) +86 21 3255 8368 | techsupportchina@fluidigm.com **Japan** +81 3 3662 2150 | techsupportjapan@fluidigm.com

All other Asian countries +1 650 266 6100 | techsupportasia@fluidigm.com **Central and South America** +1 650 266 6100 | techsupportlatam@fluidigm.com

For Research Use Only. Not for use in diagnostic procedures.

This product contains antibodies manufactured by and sold under license from BioLegend and licensees thereof.

Information in this publication is subject to change without notice. **Safety data sheet information** fluidigm.com/sds **Patent and license information** fluidigm.com/legalnotices | Fluidigm, the Fluidigm logo, and CyTOF are trademarks or registered trademarks of Fluidigm Corporation in the United States and/or other countries. © 2015 Fluidigm Corporation. All rights reserved. 07/2015