

Human CD4 Treg Surface ID Panel

Catalog# / Size	362251 / 25 tests
Clone	;;;
Regulatory Status	RUO
Other Names	Treg Panel
Isotype	Mouse IgG1, κ/Rat IgG2b, κ
Description	This panel allows the identification of regulatory CD4 T cells (Treg) using surface markers, and it is intended to be applied to sort or analyze Treg cells using flow cytometry. The panel does not contain any conjugated PE antibody to leave room to incorporate an antibody of choice in the analysis, using a common and bright fluorophore. Tregs are critical to maintain immune system homeostasis by suppressing the function of other cells. Thus, they help maintain a proper balance between healthy and disease states such as autoimmunity and cancer.

Product Details

Verified Reactivity	Human
Formulation	Antibodies supplied in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA). 7-AAD supplied in PBS, pH 7.2 with 0.09% (w/v) sodium azide.
Preparation	This reagent contains one vial each of 7-AAD, APC/Cy7 conjugated anti-human CD3, FITC conjugated anti-human CD4, APC conjugated anti-human CD25, and PE/Cy7 conjugated anti-human CD127 (IL-7Ra) at optimal concentration for multicolor flow cytometric analysis. CAUTION: 7-AAD is a potential carcinogen. It is recommended that the user wear protective clothing, gloves, and eye/face protection in order to avoid contact with skin and eyes.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The reagent 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.
Application Notes	The panel has been verified by NanoString (https://www.nanostring.com) to be compatible with their Vantage 3D™ Immune Cell Profiling Assay for 3D Flow™ Analysis. This product consists of four antibody vials, and one 7-AAD vial. Antibodies include APC/Cy7 anti-human CD3, FITC anti-human CD4, APC anti-human CD25, and PE/Cy7 anti-human CD45RO. For a more flexible panel building design, please visit our Multicolor Panel Selector tool. If you prefer another live/dead reagent, please explore our chemical probes and Zombie dyes

Antigen Details

Cell Type	Tregs
Biology Area	Immunology
Molecular Family	CD Molecules
Antigen References	1. Sudo T, <i>et al.</i> 1993. <i>Proc. Natl. Acad. Sci. USA</i> 90:9125. 2. He YW, Malek TR. 1998. <i>Crit. Rev. Immunol.</i> 18:503. 3. Huster KM, <i>et al.</i> 2004. <i>Proc. Natl. Acad. Sci. USA</i> 101:5610.

4. Taniguchi T, Minami Y. 1993. *Cell* 73:5.
5. Waldmann T. 1991. *J. Biol. Chem.* 266:2681.
6. Beverley PC, Callard RE. 1981. *Eur. J. Immunol.* 11:329.
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8. Zhu J, *et al.* 2010. *Annu Rev. Immunol.* 28:445.
9. Vignali DA. 2010. *J. Immunol.* 184:5933.
10. Zhou L, *et al.* 2009. *Immunity* 30:646.
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12. Zhu J, Paul WE. 2008. *Blood* 112:1557.

Gene ID

[915](#)

[920](#)

[3559](#)

[3575](#)

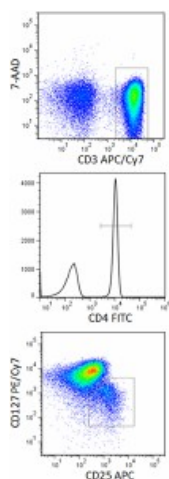
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Human CD4 Treg Surface ID Panel

Product Data



Human PBMCs were stained using the Human CD4 Treg Surface ID Panel consisting of 7-AAD, anti-human CD3 APC/Cy7, CD4 FITC, CD25 APC, and CD127 (IL-7R α) PE/Cy7 conjugated antibodies. Images represent live (7-AAD⁻) CD3⁺ cells (top panel), CD4⁺ cells (middle panel, histogram), and CD127 (IL-7R α)^{low} CD25^{high} Tregs. Cells were gated on lymphocytes.

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