

## Achieve More: 21 Colors With Just 2 Lasers

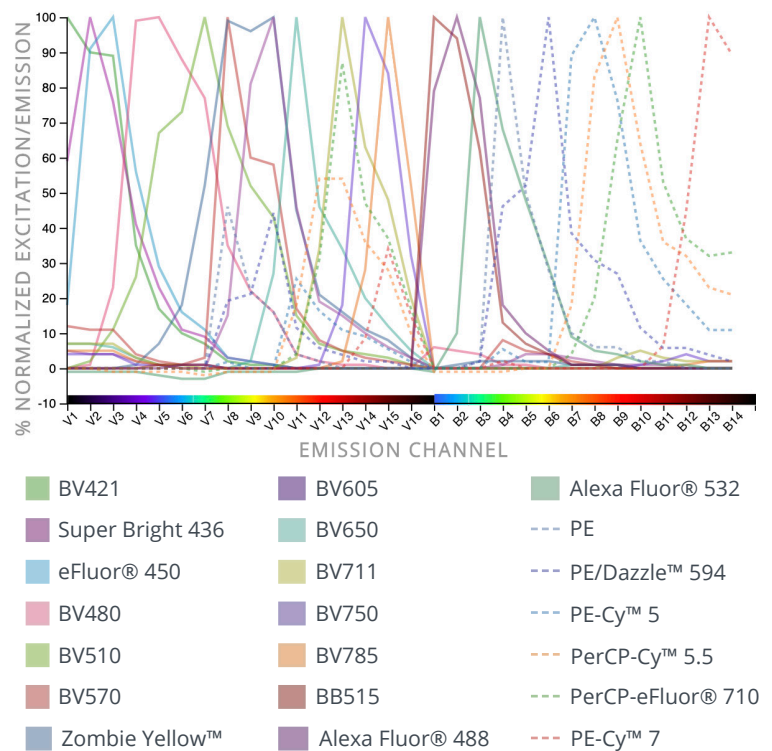
Until recently, developing multicolor fluorescence-based flow cytometry assays on a two laser system has been limited to approximately 10 colors because of two limitations: hardware designs with 10 or fewer detectors; and conventional optical designs with 1 detector assigned to 1 fluorochrome<sup>1</sup>.

With 30 fluorescence detectors and only 2 lasers, the Cytek® Northern Lights 2 laser (405 & 488 nm) configuration has the capability of getting you more information from your data with fewer lasers to maintain. Cytek has developed a 21 color human immunophenotyping panel acquired from just a single tube, with outstanding resolution.

### 21 Color Panel

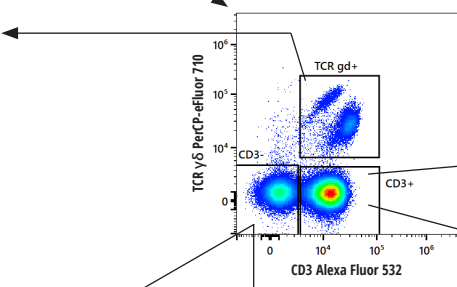
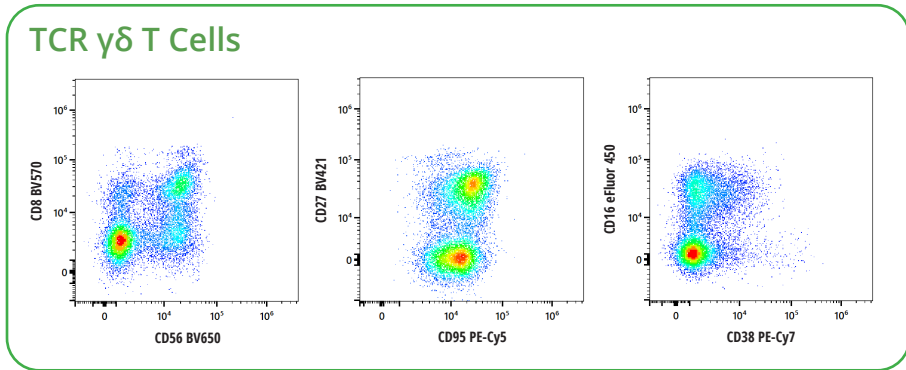
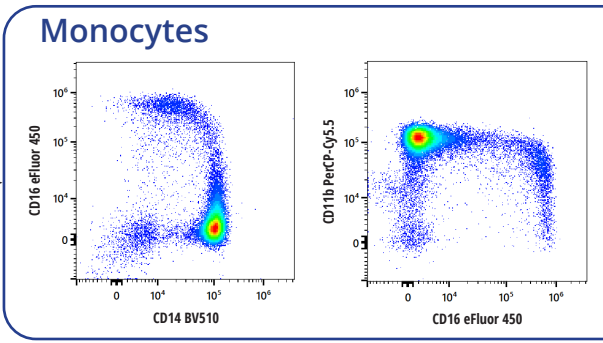
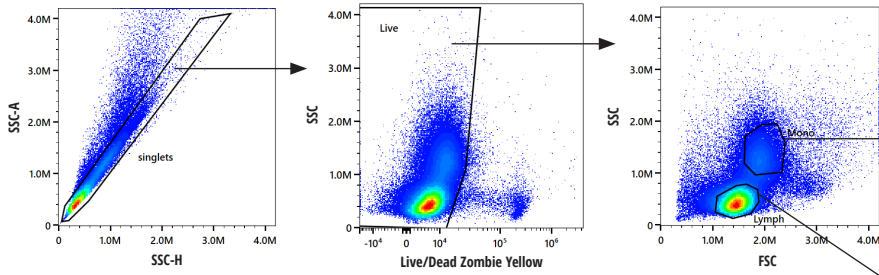
A summary of reagents and a spectral overlay of the 21 fluorochromes used in our 21 color panel are shown below. The panel is demonstrated on the next page using thawed human peripheral blood mononuclear cells that were stained, washed, and analyzed on a Northern Lights 2-laser (405 & 488 nm) cytometer.

	Vendor	Cat. No.
CD11c BD Horizon™ BB515	BD™ Biosciences	566349
CD45RA Alexa Fluor® 488	BioLegend®	304114
CD3 Alexa Fluor® 532	Thermo Fisher	58-0038-42
CD25 PE	BioLegend	353236
CCR7 PE/Dazzle™ 594	BioLegend	353236
CD95 PE/Cy™5	BioLegend	305610
CD11b PerCP/Cy™5.5	BioLegend	301328
TCR γδ PerCP-eFluor® 710	Thermo Fisher	46-9959-42
CD38 PE/Cy™7	BioLegend	356608
CD27 Brilliant Violet 421™	BioLegend	302824
CD123 Super Bright 436	Thermo Fisher	62-1239-42
CD16 eFluor® 450	Thermo Fisher	48-0168-42
IgD BD Horizon™ BV480	BD Biosciences	566138
CD14 Brilliant Violet 510™	BioLegend	301842
Zombie Yellow™	BioLegend	423104
CD8 Brilliant Violet 570™	BioLegend	301038
CD127 Brilliant Violet 605™	BioLegend	351334
CD56 Brilliant Violet 650™	BioLegend	318344
CD19 Brilliant Violet 711™	BioLegend	363022
CD4 Brilliant Violet 750™	BioLegend	344644
HLA-DR Brilliant Violet 785™	BioLegend	307642



Spectrum overlay plot for the 21 fluorochromes used in the panel was created using the Cytek Spectrum Viewer found on the Cytek website at <https://spectrum.cytekbio.com>.

1 To learn more, read the Spectral Analysis Meets Flow Cytometry white paper at [cytekbio.com/blogs/resources](https://cytekbio.com/blogs/resources).



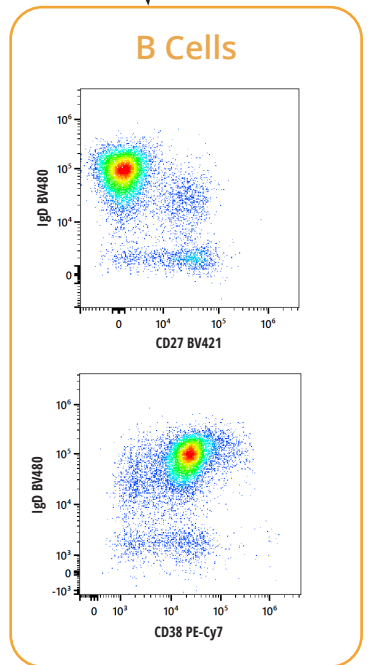
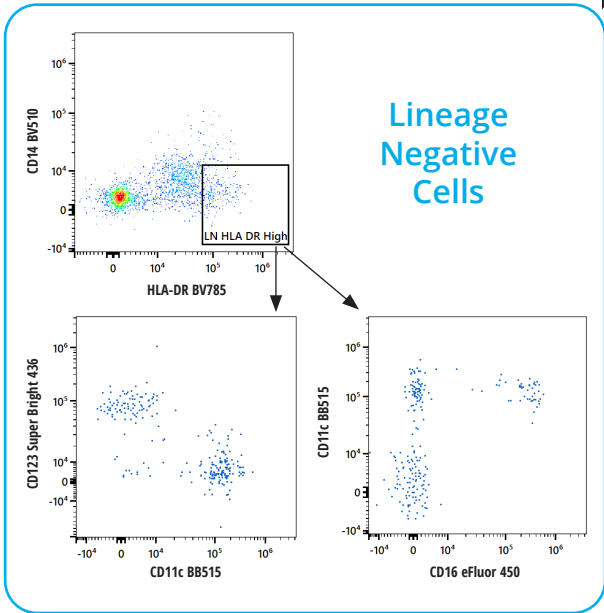
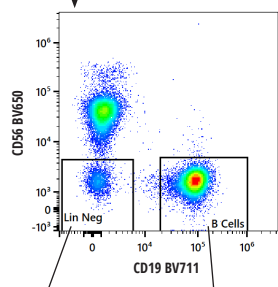
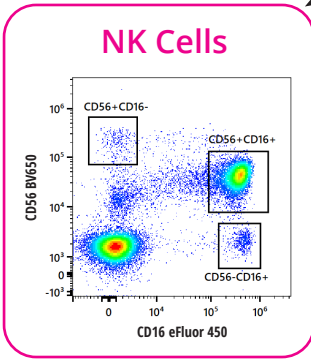
**See This Panel Grow**

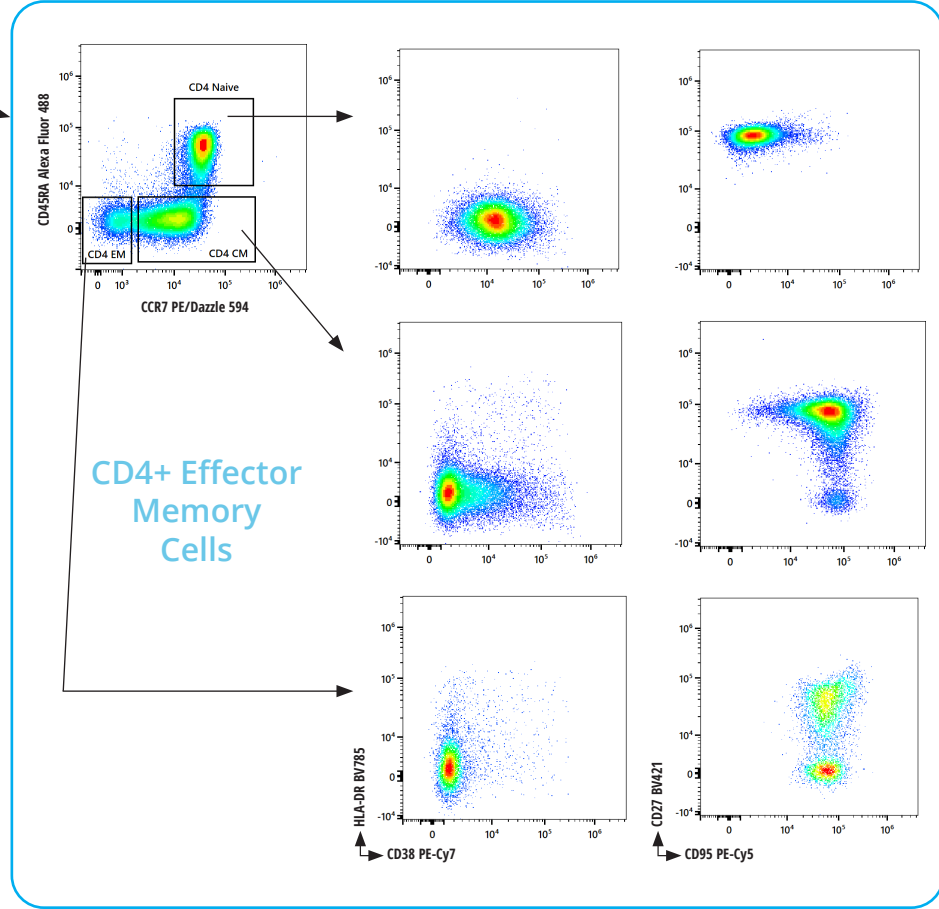
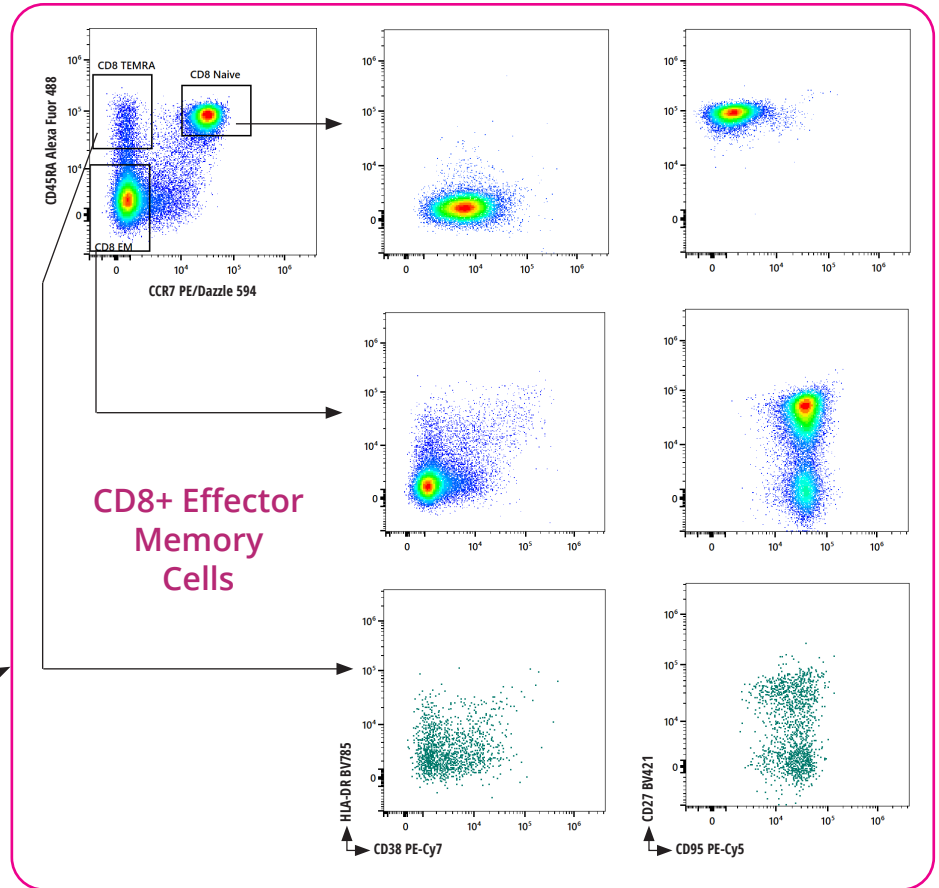
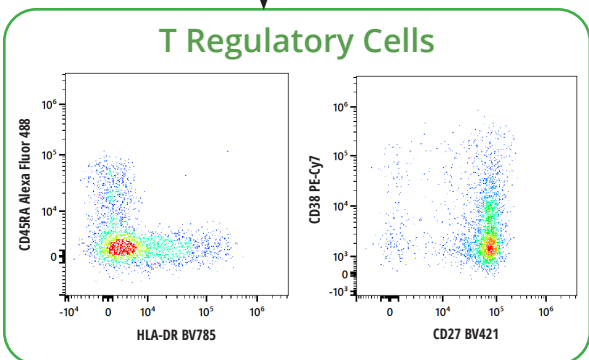
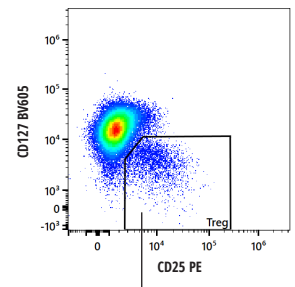
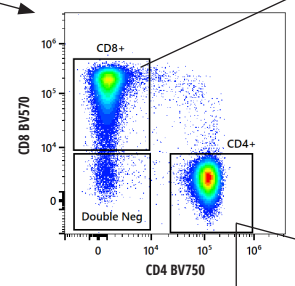
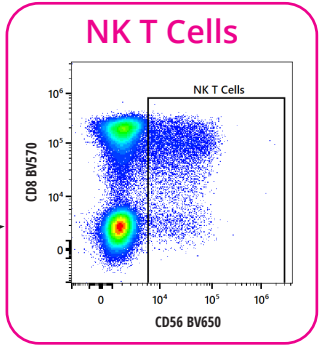
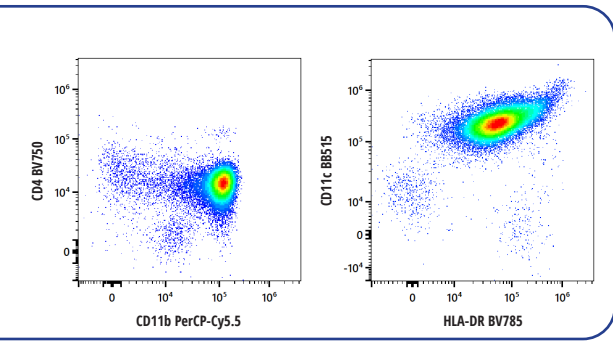
This 21 color panel is a subset of the 24 color panel demonstrated on the Cytek Northern Lights 3 laser system, and a subset of the 40 color panel demonstrated on the 5 laser Cytek Aurora. Since this 21 color panel was demonstrated using a thawed human PBMC sample, a viability marker was added to the panel that is not present in the two larger panels.

Visit the Northern Lights product page at [cytekbio.com](http://cytekbio.com) to see the 24 color panel demonstrated in fresh human whole blood:



Visit the Aurora product page at [cytekbio.com](http://cytekbio.com) to see the 40 color panel demonstrated in fresh human whole blood:





**Cytek® Northern Lights - Data Sheet**  
Say Hello to a New Reality



**For more information, email us at:**  
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**Or contact [sales@cytekbio.com](mailto:sales@cytekbio.com)**

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