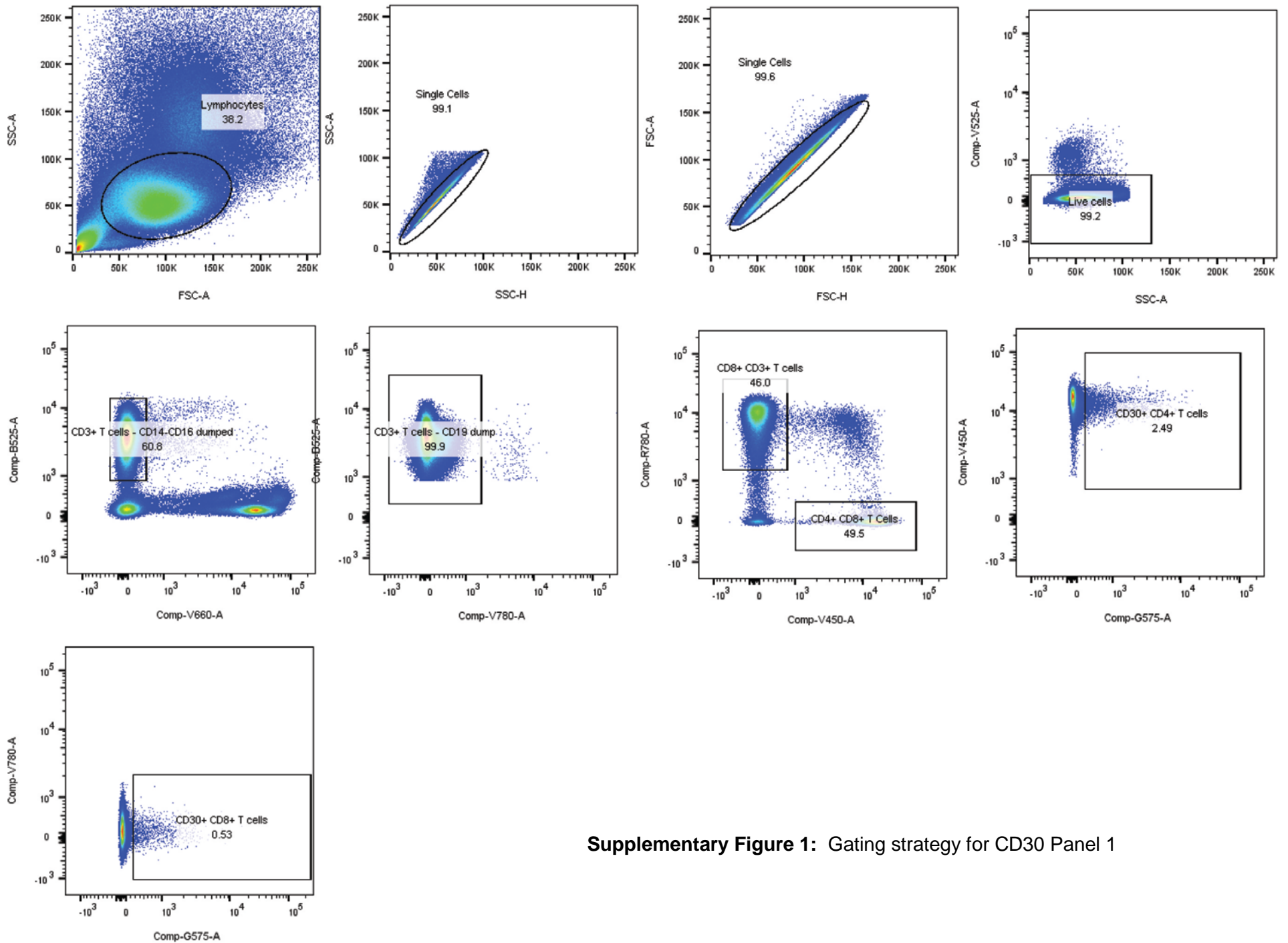


Supplementary Materials:

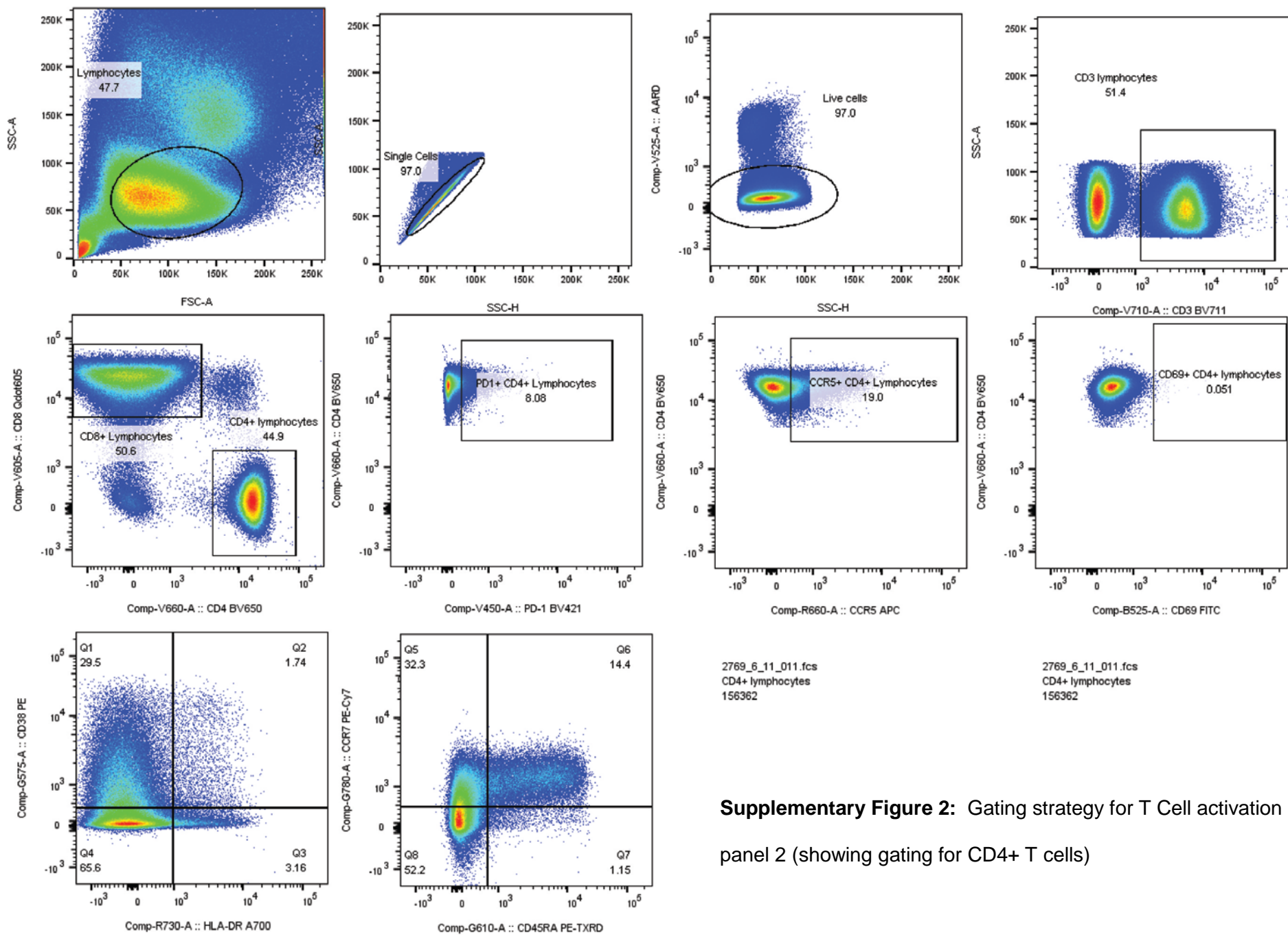
Flow cytometric methods: Cryopreserved PBMC were thawed rapidly, washed twice with phosphate-buffered saline containing 2% heat-inactivated fetal bovine serum. The cells were stained with Guava ViaCount and counted on a Beckman Coulter CytoFlex instrument. A minimum of 1 million PBMC were stained for the first panel containing naïve and memory markers and at least 2 million PBMC were stained to assess the frequencies of CD4⁺ T cells expressing CD30. Data from both panels were collected on a 4-laser BD LSR-II and data were analyzed using FlowJo 10.4.2 software.

Supplemental Table 1. Flow cytometry staining reagents.

| Antibody | Fluorophore | Clone | Vendor |
|--|-------------------------|--------------|-------------------|
| Panel 1 CD30 Frequency | | | |
| Dead Cells | Aqua Amine Reactive Dye | n/a | Life Technologies |
| CD3 | FITC | UCHT1 | BioLegend |
| CD4 | Brilliant Violet 421 | OKT4 | BioLegend |
| CD8 | APC-Cy7 | HIT8a | BioLegend |
| CD14 | Brilliant Violet 650 | M5E2 | BioLegend |
| CD16 | Brilliant Violet 650 | 3G8 | BioLegend |
| CD19 | Brilliant Violet 786 | HIB19 | BioLegend |
| CD30 | PE | BERH8 | BD |
| CD32 | APC | FUN-2 | BioLegend |
| Panel 2 Naïve/Memory and Activation | | | |
| Dead Cells | Aqua Amine Reactive Dye | n/a | Life Technologies |
| CCR7 | PE-Cy7 | 3D12 | BD |
| CD3 | Brilliant Violet 711 | UCHT1 | BD |
| CD38 | PE | HB7 | BD |
| CD4 | Brilliant Violet 650 | SK3 | BD |
| CD45RA | PE-TexasRed | MEM-56 | Life Technologies |
| CD69 | FITC | L78 | BD |
| CD8 | Brilliant Violet 605 | SK1 | BD |
| HLA-DR | Alexa700 | G46-6 | BD |
| PD-1 | Brilliant Violet 421 | EH12.1 | BD |
| CCR5 | APC | J418F1 | BioLegend |



Supplementary Figure 1: Gating strategy for CD30 Panel 1



Supplementary Figure 2: Gating strategy for T Cell activation panel 2 (showing gating for CD4+ T cells)