

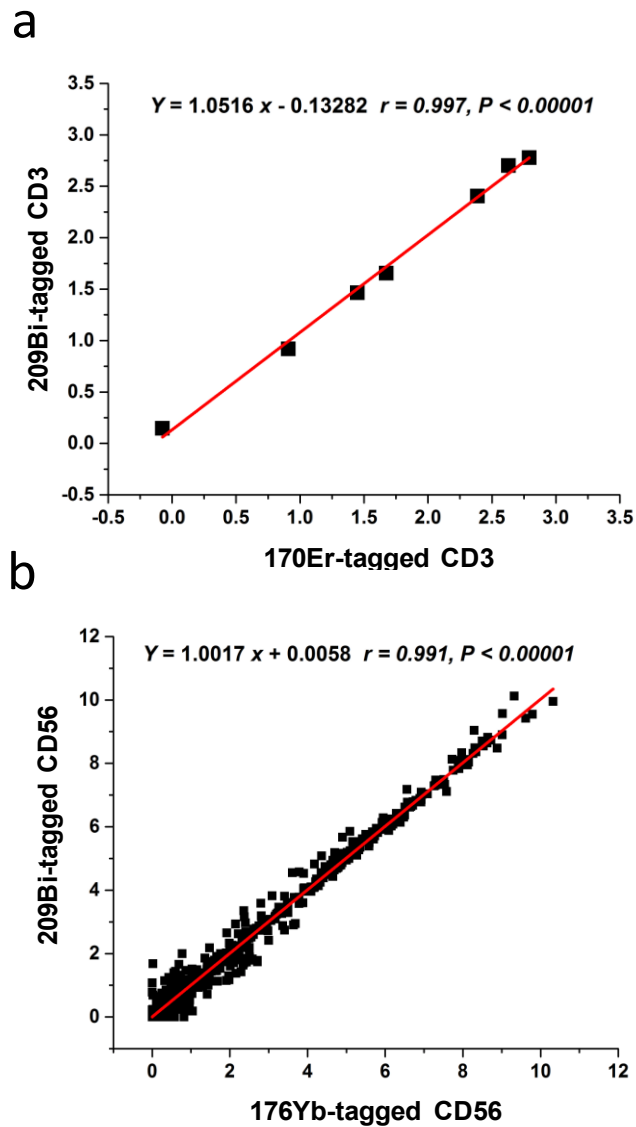
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# Metal-isotope-tagged monoclonal antibodies for high-dimensional mass cytometry

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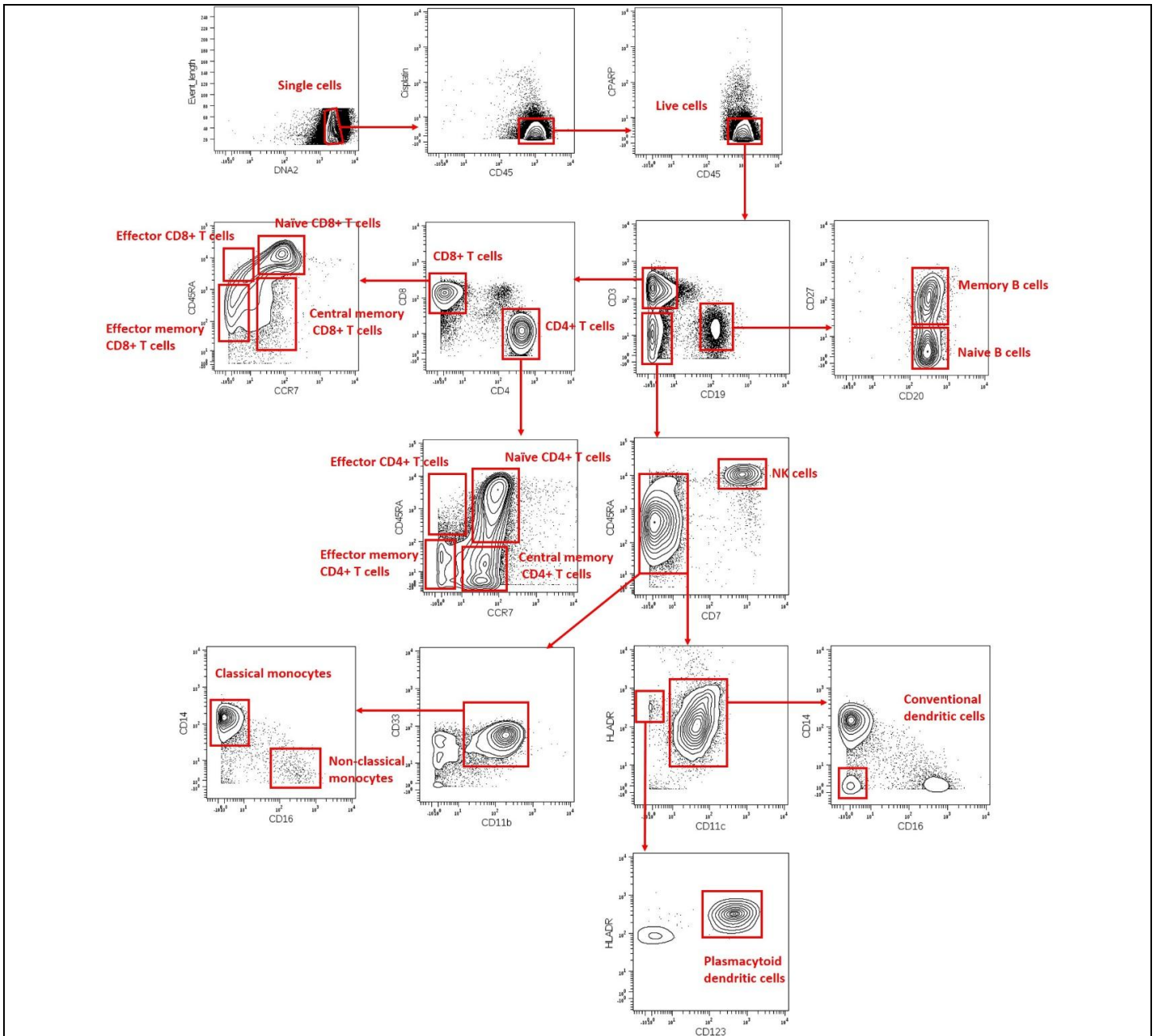
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### Supplementary Figure 1

Pearson correlations between bismuth- and lanthanide-tagged antibodies.

**a)** Linear regression of marker intensity using  $^{209}\text{Bi}$ - and  $^{170}\text{Er}$ -tagged CD3 antibodies. Log10 mean value of seven marker intensities in Jurkat cells. Pearson correlation,  $r = 0.997$ ;  $P < 0.00001$ , two-tailed t test. **(b)** Linear regression of marker intensity using  $^{209}\text{Bi}$ - and  $^{176}\text{Yb}$ -tagged CD56 antibodies. Log2 mean value of 40 marker intensities in 15 cell subsets from human PBMCs normalized to minimal marker value in each cell subset. The data includes 600 combinations, 15 populations x 40 markers. Pearson correlation,  $r = 0.991$ ;  $P < 0.00001$ , two-tailed t test.



**Supplementary Figure 2**

Manual gating strategy for PBMCs using biaxial scatter plots.

The gating hierarchy is demonstrated for 15 manually gated cell populations, which are used in the viSNE plots and heat maps in Figure 9. All gates were utilized with Boolean “AND” logic in Cytobank software.