**Supplementary Table 2.** 8-color antibody combinations

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Tube | FITC | PE | PerCP- Cy5.5 | PE-Cy7 | APC | APC- AF750 | BV421 | V500 |
|  |  |  |  |  |  |  |  |  |
| A | CD20 | CD22 | CD34 | CD19 | CD13+CD33 | CD38 | CD10 | CD45 |
| B | CD20 | CD49f | CD34 | CD19 | CD58 | CD38 | CD10 | CD45 |
| C | CD24 | CD304 | CD34 | CD19 | CD86 | CD38 | CD10 | CD45 |

CD10-Brilliant Violet 421 (BioLegend, San Diego, CA, Clone HI10a); CD13-APC (BD Biosciences, Clone WM15); CD19-PE-Cy7 (BD Biosciences, Clone SJ25C1); CD20-FITC (BD Biosciences, Clone L27); CD22-PE (BD Biosciences, Clone S-HCL-1); CD24-FITC (Dako, Clone SN3); CD33-APC (BD Biosciences, Clone P67.6); CD34-PerCP-Cy5.5 (BD Biosciences, Clone 8G12); CD38-APC-Alexa Fluor 750 (Beckman-Coulter, Clone LS198-4-3); CD45-V500 (BD Biosciences, Clone HI30); CD49f-PE (BD Biosciences, Clone GoH3); CD58-APC (Beckman-Coulter, Clone AICD58); CD86-APC (BD Biosciences, Clone 2331); CD304-PE (Miltenyi Biotec, Clone BDCA-4).