



**SUPPLEMENTARY FIG. S5.** Increasing pH and adding NIC did not affect CD41 or CD42b expression. CD34<sup>+</sup> HSPCs were seeded in X-VIVO 10 with cocktail “c” (Table 1) using IL-3 from R&D Systems and maintained at 5% O<sub>2</sub> and pH 7.2. On day 5, cells were washed, resuspended at pH 7.4/20% O<sub>2</sub>, and supplemented with cocktail 3. (A, C, E) On day 7, cells were washed and resuspended in media adjusted to pH 7.4 (squares) or 7.6 (triangles) and supplemented with cocktail 3. (B, D, F) On day 7, cells from different cultures were washed and resuspended in media adjusted to pH 7.4 or 7.6 and supplemented with cocktail 3. At either day 7 (circles) or 8 (triangles), cultures at both pH 7.4 (solid) and 7.6 (open) were supplemented with 6.25 mM NIC. The percentages of (A, B) CD41<sup>+</sup> and (C, D) CD42b<sup>+</sup> cells in the viable population and (E, F) the percentage of high-ploidy (>4N) Mks are shown. Data represent the mean ± SEM for *n* = 3 donors.