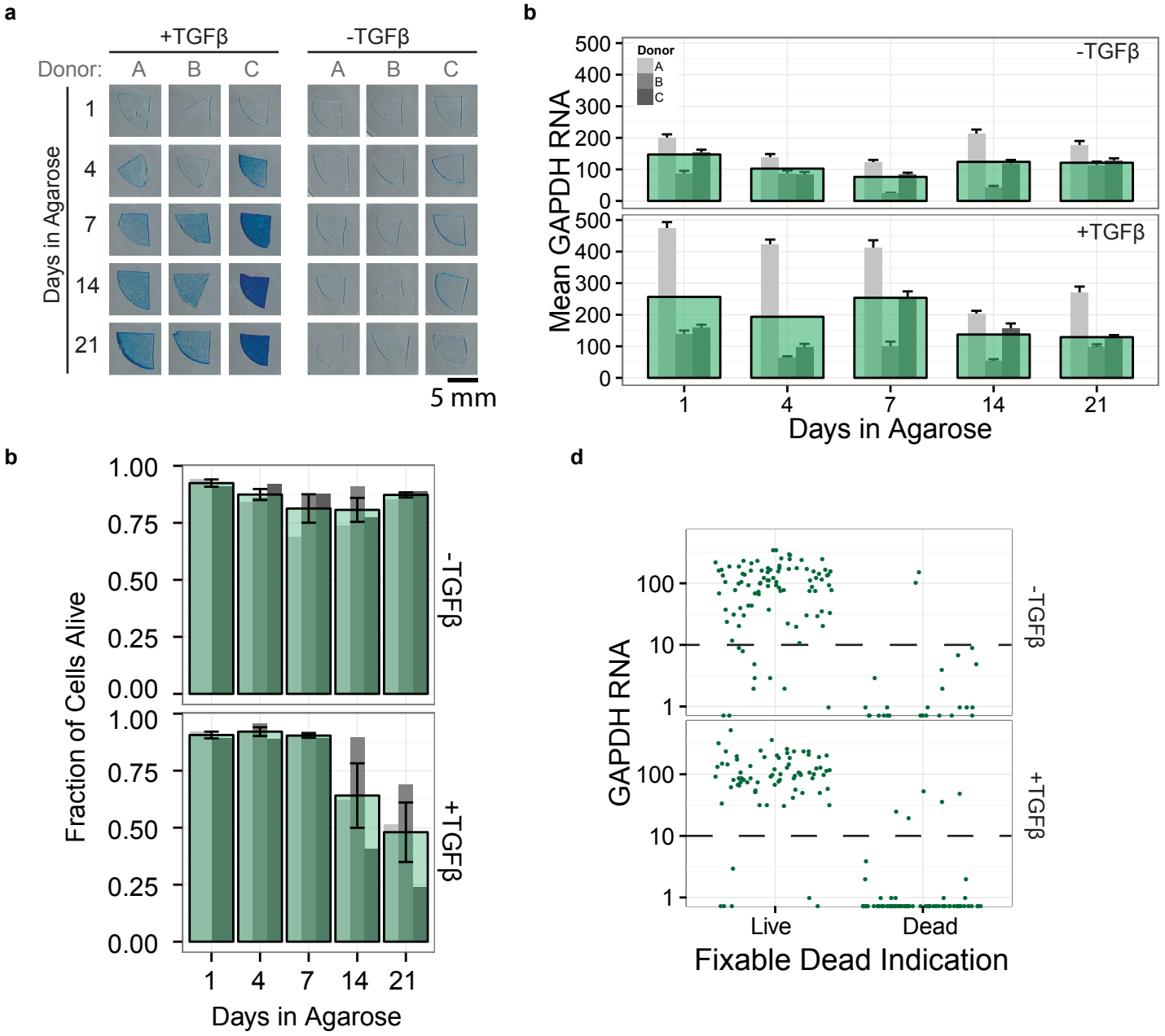

Supplementary Figure 1: Matrix production, GAPDH copy number, and viability of MSCs in 3D culture.
a) Alcian blue staining for sulfated proteoglycans for MSCs in 3D culture, for all donors and time points, with and without TGFβ induction of chondrogenesis. Donor B is also shown in Figure 1. Scale bar = 5 mm. b) Mean GAPDH RNA counts and c) cell viability over 21 days in 3D culture. Narrow bars represent the mean within an individual donor; overlaid bars represent the mean across donors. Error bars indicate standard error (n = 24-128 cells per donor and condition). RNA count means compared by t-tests with Satterthwaite approximation and simulated adjustment for multiple comparisons. See Supplementary Table 4 for all statistical comparisons. d) Simultaneous RNA FISH and fixable dead staining established a threshold of GAPDH>10 to differentiate live cells from dead cells for further analysis.
n = 85 cells for TGFβ-, 75 cells for TGFβ+.