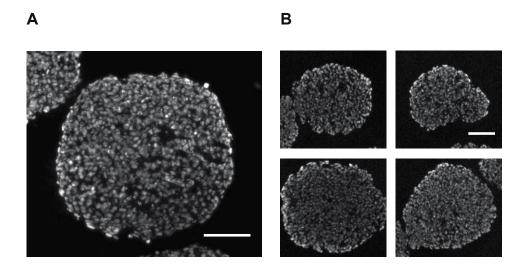


Supplementary Figure 1. Optical sections of day 3 EBs expressing NKX2-5 at random particle rotations. Three different optical sections were imaged 35 µm deep into several different EBs (displayed as single data points). Different optical sections were attained by turning or disrupting the EBs between each image acquisition. The standard deviation of each measurement signifies the variability in measurements of optical sections taken at different positions in the 3D volume.



Supplementary Figure 2. Histological sections of day 4 EBs. Nuclei are stained with DAPI (bright signal). All EBs contained close cell association without evidence of cysts. Scale bar = $100 \ \mu m$.