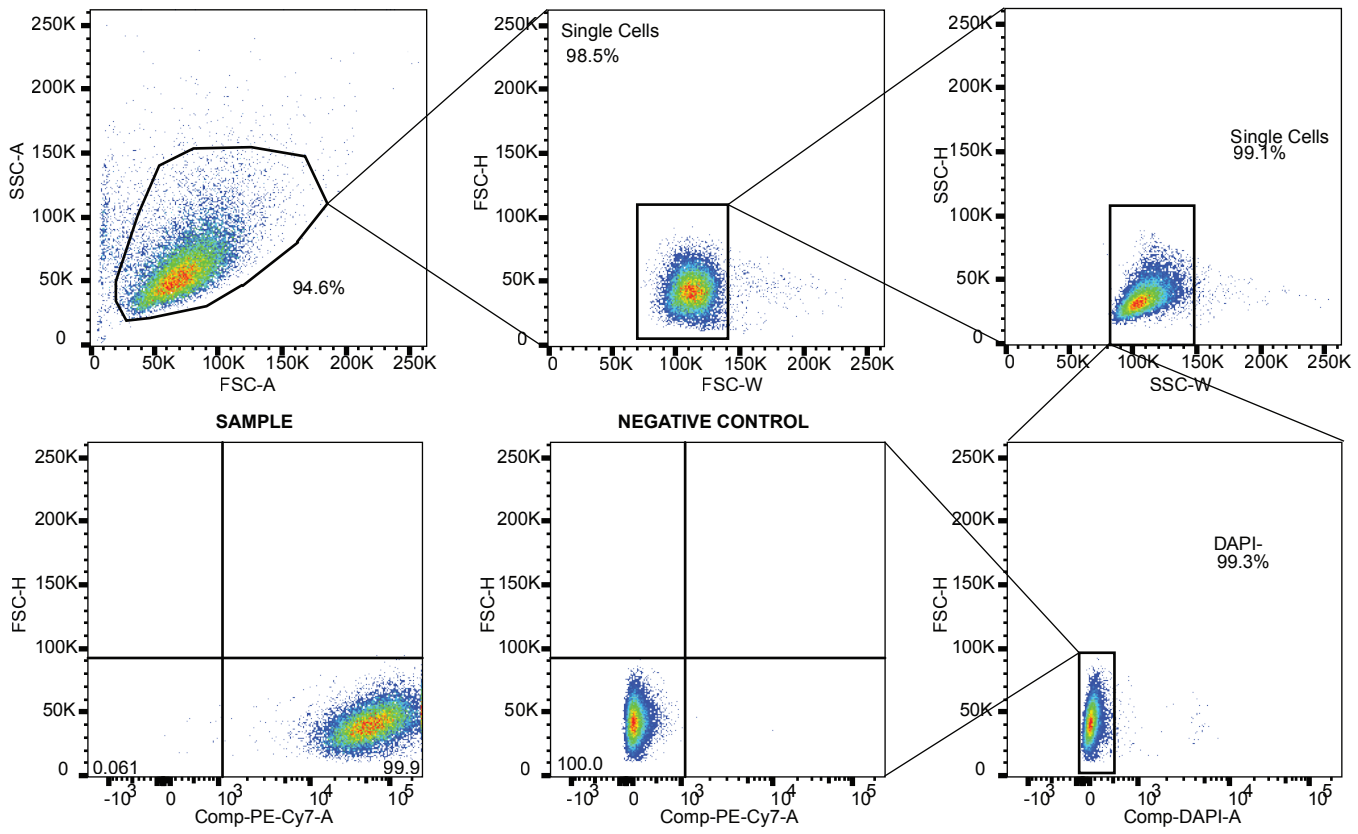


Supplementary Figure 1. Characterization of the MEL1 GPI: H2B-GFP ESC line. A) Successfully targeted lines containing GFP after H2B produce a 1kb product upon PCR of the locus. B) i) IF shows uniform expression of GFP across all cells in the MEL1 GPI: H2B-GFP hPSC line at the pluripotent stage (GFP, brightfield). Scale bar = 140 μ M. ii) FACS analysis shows nearly 100% of cells of the MEL1 GPI: H2B-GFP ESC line express GFP. C) IF shows that the MEL1 GPI: H2B-GFP hPSC line uniformly expresses the pluripotency markers of NANOG and OCT4. Scale bar = 50 μ M.



Supplementary Figure 2. FACS analysis gating strategy. Representative gating strategy for all FACS panels: size selection, single cell selection, live cell selection, gates set on unstained negative control.