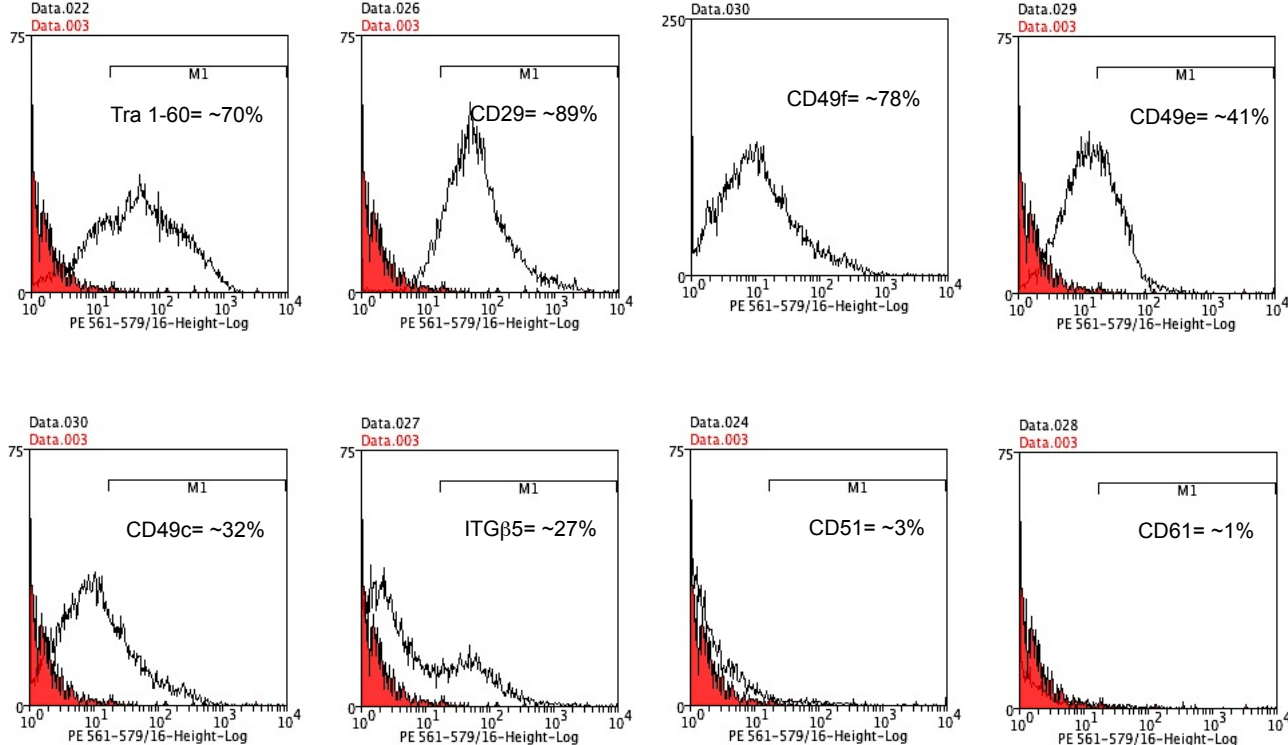
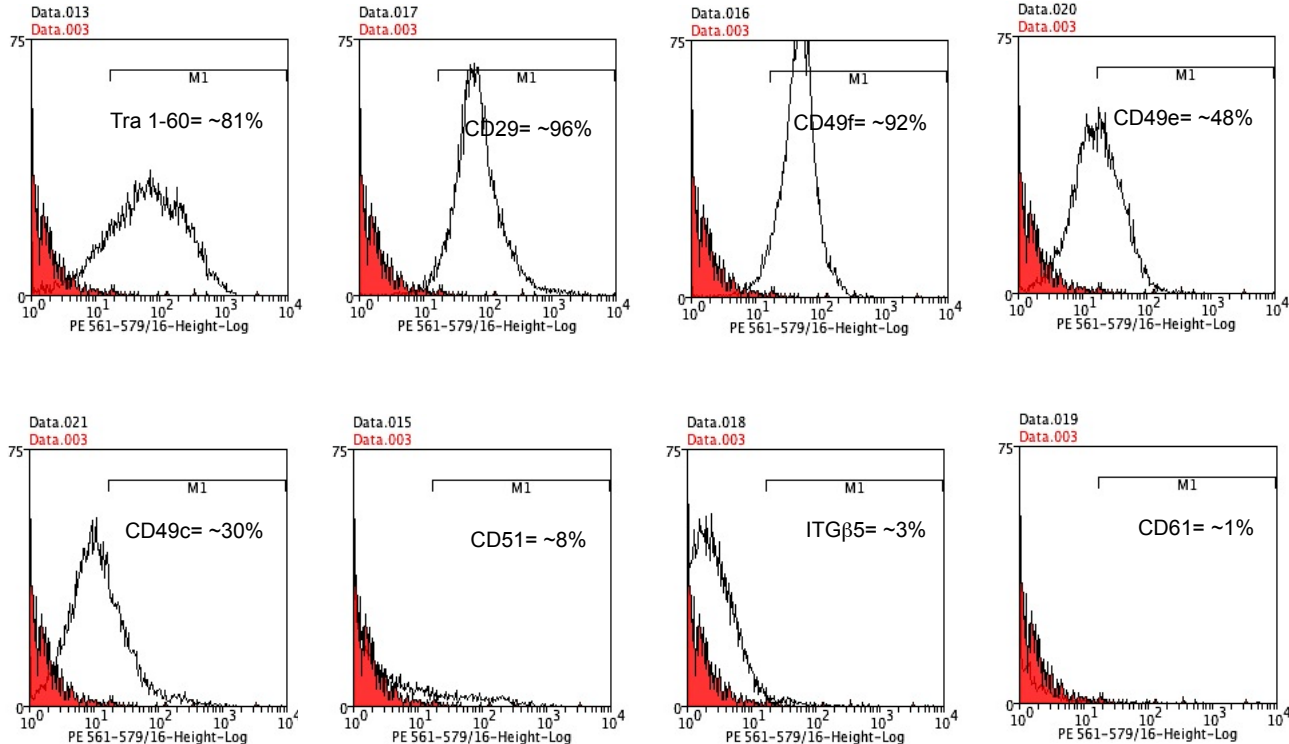


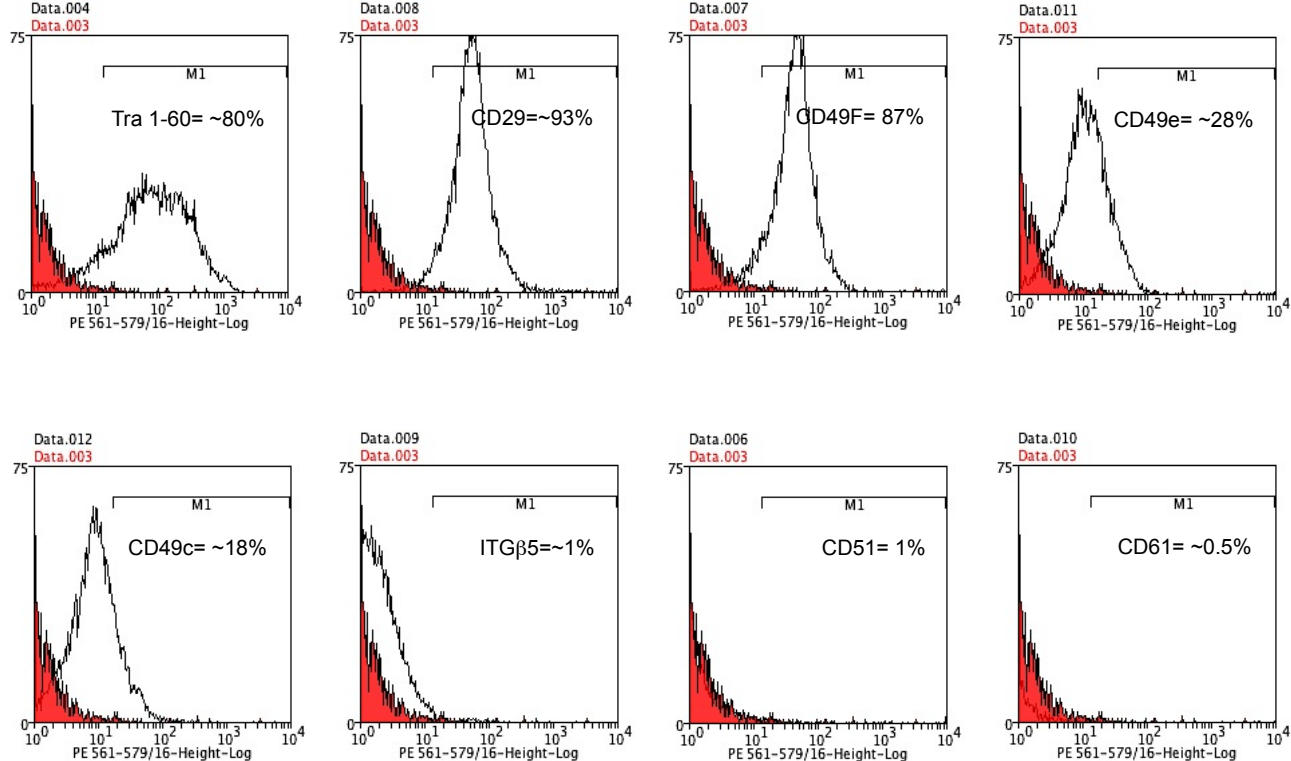
Supplemental Figure 1. Expression of integrin isoforms in CHB10-human embryonic stems cultured on Matrigel-coated plates. Representative histograms showing the percentage of positive cells for specific integrins isoforms: integrin β 1 (CD29), integrin β 5, integrin α 1 (CD49a), integrin α 2 (CD49b), integrin α 3 (CD49c), integrin α 5 (CD49e), integrin α 6 (CD49f). SSEA4 was used to identify the percentage of undifferentiated hESCs. All antibodies were from isoforms conjugated with PE-fluorochrome, and the respective conjugated-IgG was used as control. In total 10,000 events were used to obtain the percentage of positive cells after subtracting positive cells for control IgG fluorochrome.



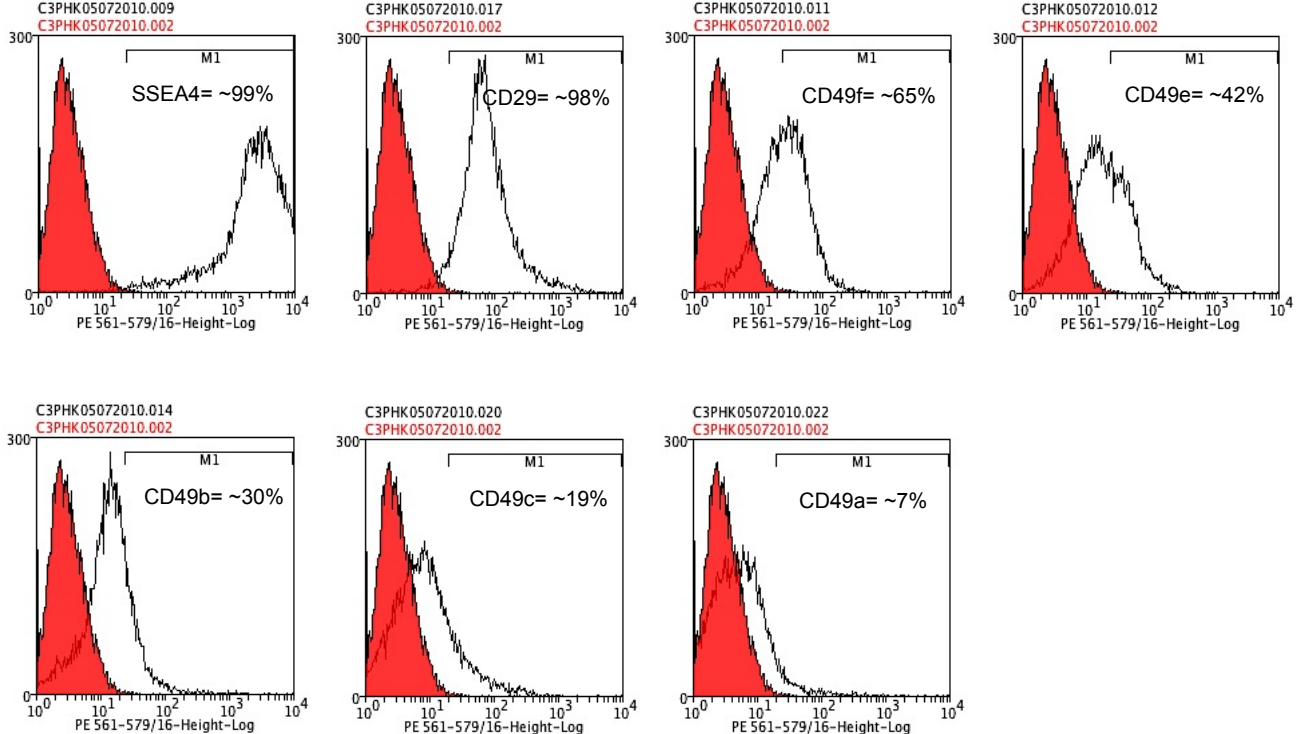
Supplemental Figure 2. Expression of integrin isoforms in CHB10-human embryonic stems cultured on recombinant human Laminin511-coated plates. Representative histograms showing the percentage of positive cells for specific integrins isoforms: integrin β 1 (CD29), integrin β 5, integrin β 3 (CD61), integrin α 1 (CD49a), integrin α 2 (CD49b), integrin α 3 (CD49c), integrin α 5 (CD49e), integrin α 6 (CD49f), integrin α V (CD51). Tra 1-60 was used to identify the percentage of undifferentiated hESCs. All antibodies were from isoforms conjugated with PE-fluorochrome, and the respective conjugated-IgG was used as control. In total 10,000 events were used to obtain the percentage of positive cells, after subtracting positive cells for control IgG fluorochrome.



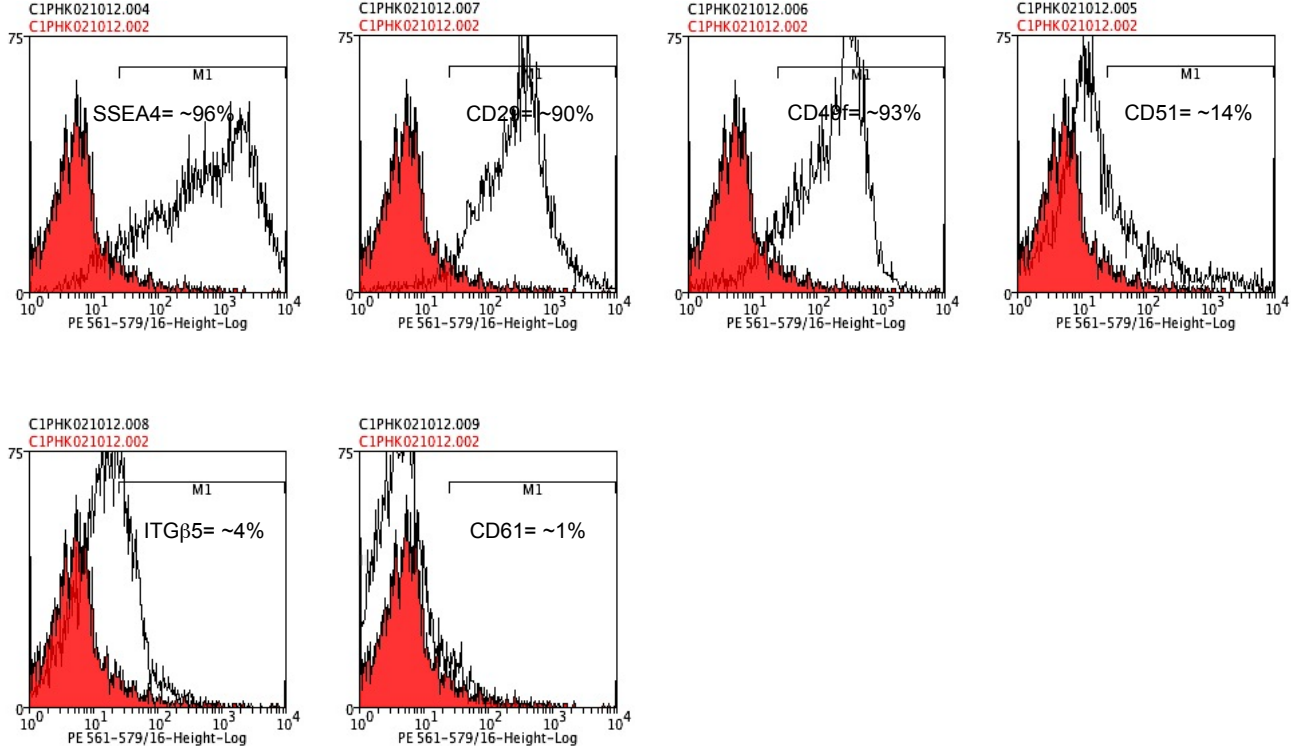
Supplemental Figure 3. Expression of integrin isoforms in CHB10-human embryonic stems cultured on recombinant human Vitronectin-coated plates. Representative histograms showing the percentage of positive cells for specific integrins isoforms: integrin $\beta 1$ (CD29), integrin $\beta 5$, integrin $\beta 3$ (CD61), integrin $\alpha 3$ (CD49c), integrin $\alpha 5$ (CD49e), integrin $\alpha 6$ (CD49f), integrin αV (CD51). Tra 1-60 was used to identify the percentage of undifferentiated hESCs. All antibodies were from isoforms conjugated with PE-fluorochrome, and the respective conjugated-IgG was used as control. In total 10,000 events were used to Obtain the percentage of positive cells after subtracting positive cells for control IgG fluorochrome.



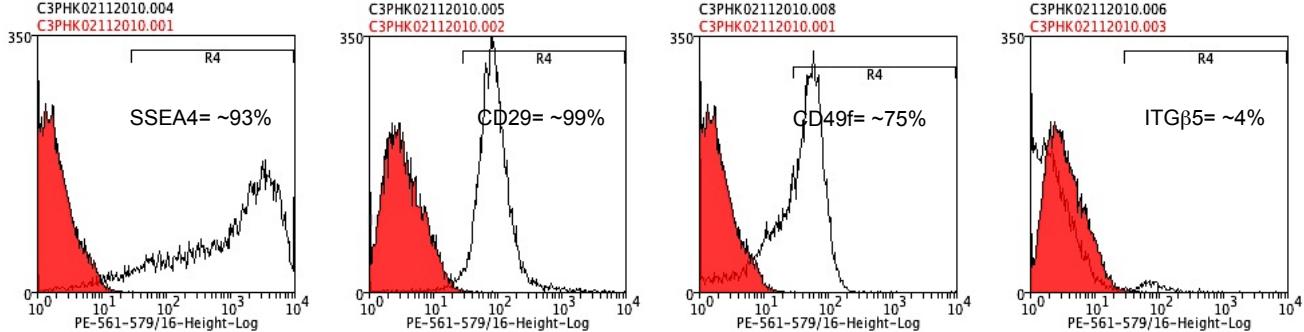
Supplemental Figure 4. Expression of integrin isoforms in CHB10-human embryonic stems cultured on PMEDSAH-grafted plates. Representative histograms showing the percentage of positive cells for specific integrins isoforms: integrin β1 (CD29), integrin β5, integrin β3 (CD61), integrin α3 (CD49c), integrin α5 (CD49e), integrin α6 (CD49f), integrin αV (CD51). Tra 1-60 was used to identify the percentage of undifferentiated hESCs. All antibodies were from isoforms conjugated with PE-fluorochrome, and the respective conjugated-IgG was used as control. In total 10,000 events were used to obtain the percentage of positive cells after subtracting positive cells for control IgG fluorochrome.



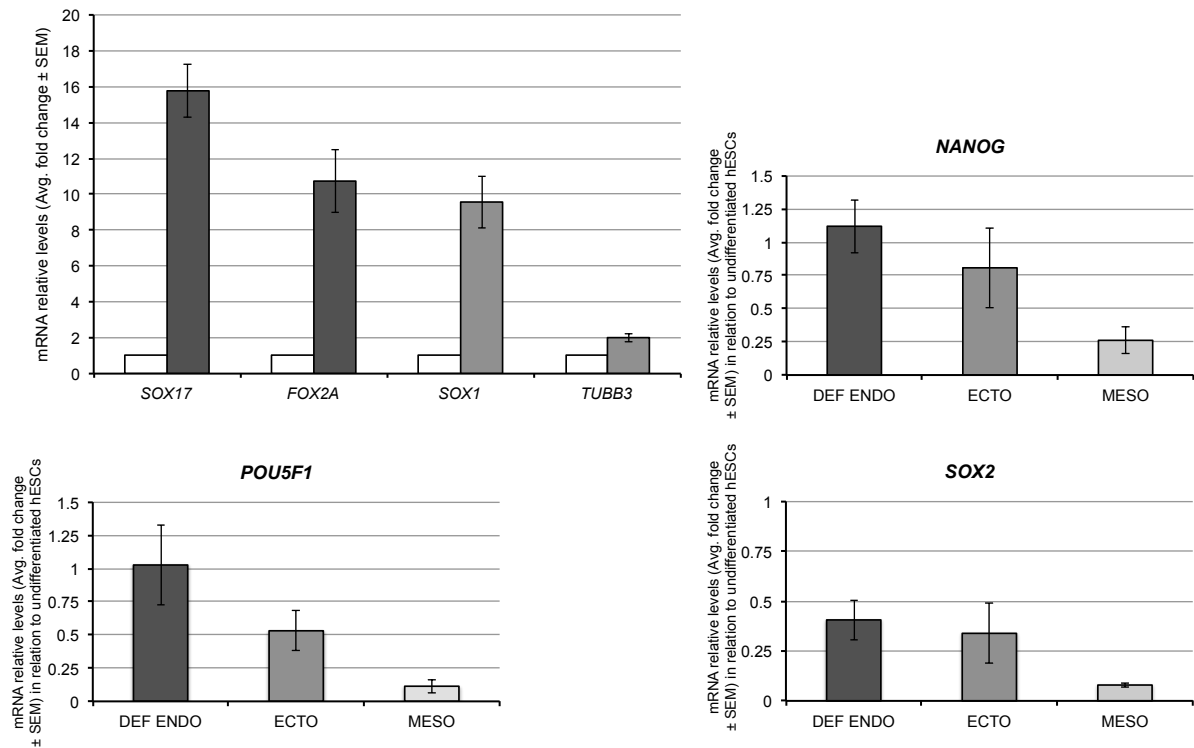
Supplemental Figure 5. Expression of integrin isoforms in H9-human embryonic stems cultured on Matrigel-coated plates. Representative histograms showing the percentage of positive cells for specific integrins isoforms: integrin β 1 (CD29), integrin α 1 (CD49a), integrin α 2 (CD49b), integrin α 3 (CD49c), integrin α 5 (CD49e), integrin α 6 (CD49f). SSEA4 was used to identify the percentage of undifferentiated hESCs. All antibodies were from isoforms conjugated with PE-fluorochrome, and the respective conjugated-IgG was used as control. In total 10,000 events were used to obtain the percentage of positive cells after subtracting positive cells for control IgG fluorochrome.



Supplemental Figure 6. Expression of integrin isoforms in H9-human embryonic stems cultured on PMEDSAH-grafted plates. Representative histograms showing the percentage of positive cells for specific integrins isoforms: integrin β 1 (CD29), integrin β 3 (CD61), integrin β 5, integrin α 6 (CD49f), integrin α V (CD51). SSEA4 was used to identify the percentage of undifferentiated hESCs. All antibodies were from isoforms conjugated with PE-fluorochrome, and the respective conjugated-IgG was used as control. In total 10,000 events were used to obtain the percentage of positive cells after subtracting positive cells for control IgG fluorochrome.



Supplemental Figure 7. Expression of integrin isoforms in hGF2-induced pluripotent stem cells on PMEDSAH-grafted plates. Representative histograms showing the percentage of positive cells for specific integrins isoforms: integrin β 1 (CD29), integrin β 5, integrin α 6 (CD49f). SSEA4 was used to identify the percentage of undifferentiated hiPSCs. All antibodies were from isoforms conjugated with PE-fluorochrome, and the respective conjugated-IgG was used as control. In total 10,000 events were used to obtain the percentage of positive cells after subtracting positive cells for control IgG fluorochrome.



Supplementary Fig. 8. Changes in mRNA expression of genes representative of pluripotency, mesoendodermal and ectodermal lineages in hESCs after induction to differentiation. hESCs were induced into mesoendodermal and ectodermal lineage differentiation, and their gene expression was compared to undifferentiated cells (control) by qRT-PCR. *SOX17* and *FOX2A* were used as indicators of mesoendodermal lineage, while *SOX1* and *TUBB3* were used for ectodermal lineage. The relative expression of pluripotent stem cell markers *NANOG*, *OCT4* (also known as *POU5F1*) and *SOX2* was also analyzed and compared between control and differentiated groups. The data is presented in mean \pm S.E.M. from three independent experimental replicates.