

Supporting Information (Sarkar et al.)

Supporting information includes two supplemental figures and nine supplemental tables (provided in .xlsx format). Additionally, annotated spectra for all single peptide identifications are provided in a .zip file.

Supplemental Figure

Supplemental Figure 1: Non-redundant peptide analysis shows that 40-45% of peptides identified in H1, H1-blank, H9-blank and MEF subcellular fractions are associated with secretory pathway organelles (GO:0005783, GO:0005793, GO:0030134, GO:0005794, GO:0030141, GO:0030133, GO:0005840) and extracellular proteins (GO:0031012, GO:0005576, GO:0044421, GO:0005615, GO:0005578).

Supplemental Figure 2: A) H1 cells grown in MEF-CM, B) H1 cells exposed to unconditioned hESC medium for 1 day, C) H9 cells grown in MEF-CM and D) H9 cells exposed to unconditioned hESC medium for 1 day, were analyzed for OCT4 and SSEA4 expression using flow cytometry.

Supplemental Tables

Supplemental Table 1: Protein lists obtained upon MS analysis of secretory pathway organelles from H1 hESCs, H9 hESCs, H1 hESCs exposed to unconditioned medium for 24 hours (H1-blank), H9 hESCs exposed to unconditioned medium for 24 hours (H9-blank) and MEFs.

Supplemental Table 2: Peptide list for matched peptides in H1, H9, H1-blank and H9-blank samples.

Supplemental Table 3: Peptide list for matched peptides in MEF sample.

Supplemental Table 4: List of non-redundant peptides and corresponding spectral counts obtained in three technical replicates, during analysis of whole cell lysate and subcellular fractions from H9 hESCs.

Supplemental Table 5: Detailed analysis for enrichment or depletion of specific organelles in subcellular fractions relative to whole cell lysate

Supplemental Table 6: List of non-redundant peptides identified in H1, H1-blank, H9-blank and MEF samples, and corresponding spectral counts. Data shown correspond to the total spectral counts for each peptide cumulatively obtained in three technical replicates

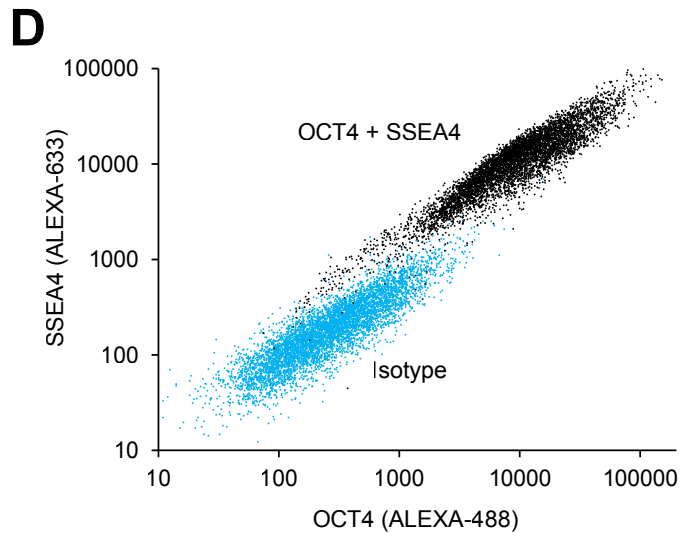
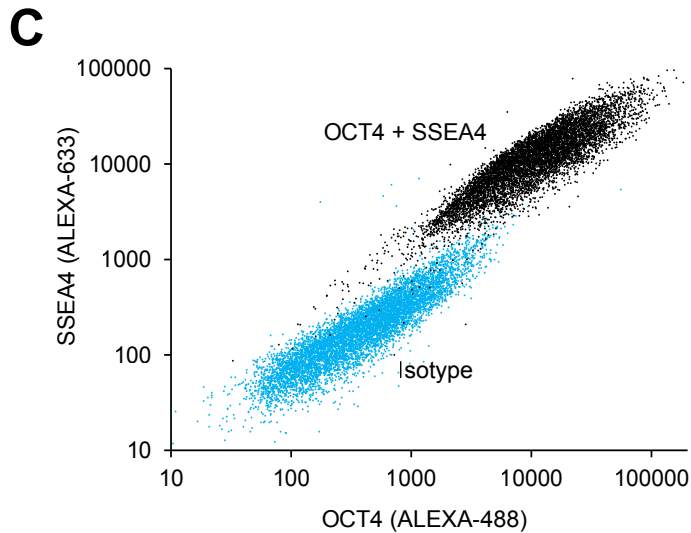
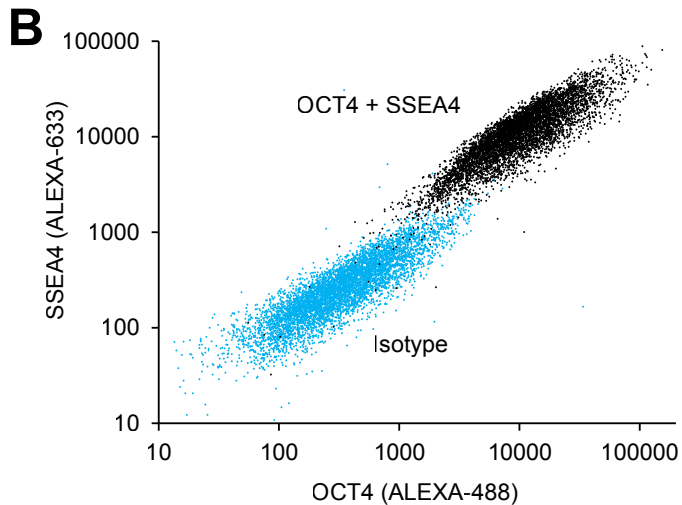
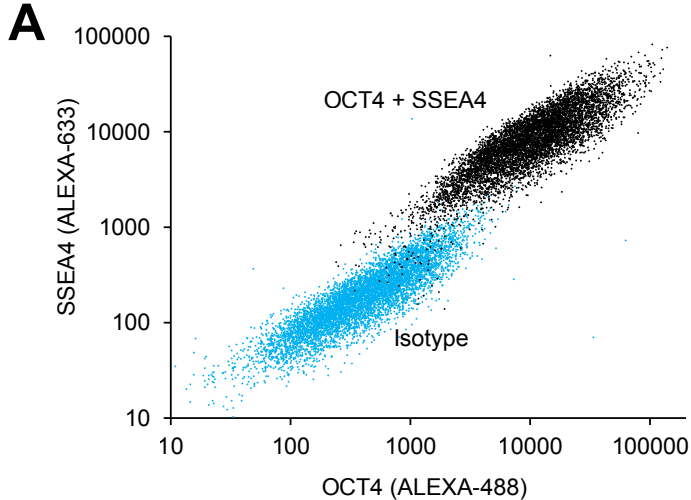
Supplemental Table 7: List of extracellular proteins identified in MEFs.

Supplemental Table 8: List of extracellular proteins identified in both H1 and H9 hESCs.

Supplemental Table 9: List of proteins with statistically significant changes in NSAF values upon comparing H1 with H1-blank and H9 with H9-blank.

MEF	H1	H1-blank	H9-blank
44.09%	42.39%	41.73%	42.27%

Supplemental Fig. 1



Supplemental Fig. 2