

Supplementary information, Figure S4 Glycomic profiling of hydrophobic and hydrophilic proteins in hPSCs and non-pluripotent cells using lectin microarrays.

(a) Hydrophilic proteins isolated from the cells were labeled and analyzed by microarray.

Hierarchical clustering of the array data for the hydrophilic fractions of 11 samples of hPSCs (7 samples of hESC and 4 samples of hiPSCs) and 10 samples of human non-pluripotent cells (2 samples of organ tissues and 8 samples of cultured cells) was performed using the NIA Array Analysis Tool. Pluripotent, non-pluripotent, malignant, and non-malignant cells are indicated by red dots, green dots, purple circles and orange circles, respectively. Blue triangles indicate two samples of WA09 cells cultured by different passage methods. (b) Hydrophobic proteins obtained from the same cell samples used for isolation of hydrophilic proteins were labeled and analyzed as above. The array data were examined using the NIA Array Analysis Tool to generate hierarchical clusters of the cells. (c) The average fluorescence intensities among 11 samples of hPSCs and 10 samples of non-pluripotent cells for each of 45 lectins on the microarrays were plotted. Upper panel: hydrophobic proteins. Lower panel: hydrophilic proteins. *P<0.05, t-test