

Supplementary

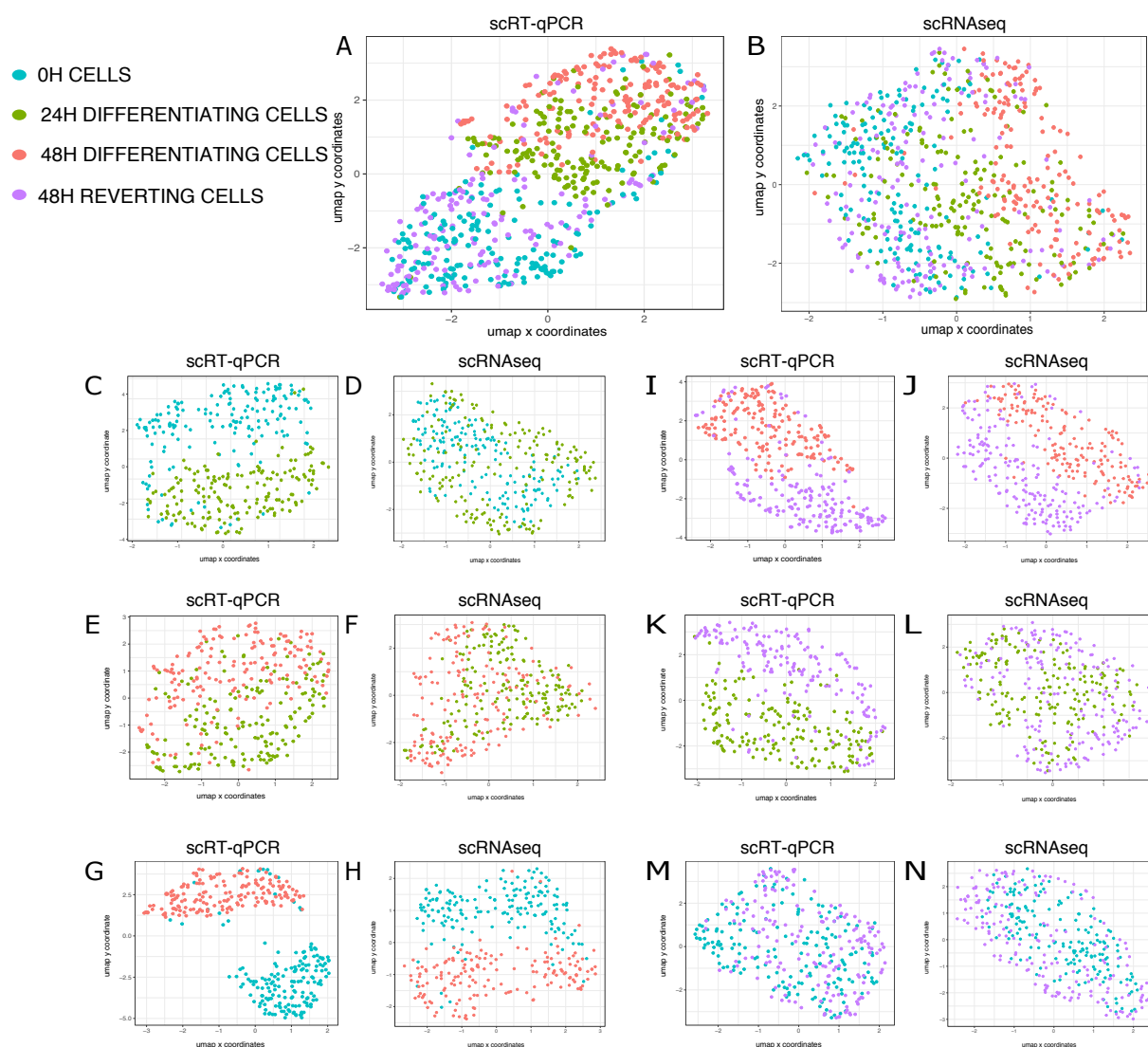


Fig. S1: UMAP visualization of scRT-qPCR and scRNAseq data. All UMAPs are recalculated when projecting conditions two by two.

Panels A, C, E, G, I, K and M: scRT-qPCR data

Panels B, D, F, H, J, L and N: scRNAseq data

Panels A and B: all 4 conditions

Panels C and D: 0H and 24H differentiating cells

Panels E and F: 24H and 48H differentiating cells

Panels G and H: 0H and 48H differentiating cells

Panels I and J: 48H differentiating and 48H reverting cells

Panels K and L: 24H and 48H reverting cells

Panels M and N: 0H and 48H reverting cells

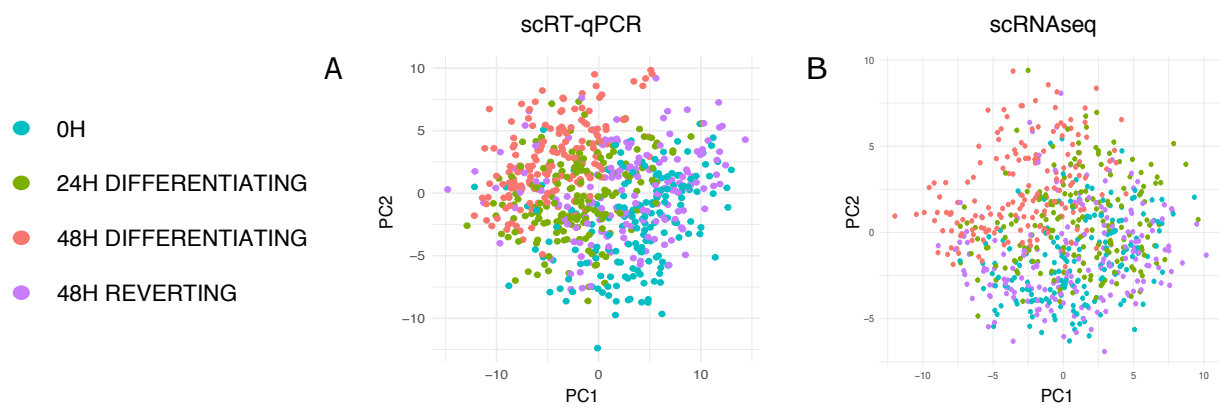


Fig. S2: Principal Component Analysis (PCA) of scRT-qPCR and scRNAseq data. PC1 and PC2 correspond to the two first components of the PCA. 0H cells are displayed in blue, 24H differentiating cells in green, 48H differentiating cells in red and 48H reverting cells in purple.

Gene Name	Ensembl_Gene_ID	mRNA half-life at 24h (hour)
<i>HSP90AA1</i>	ENSGALG000000011351	3,47
<i>TBC1D7</i>	ENSGALG000000012731	3,69
<i>RPL22L1_1</i>	ENSGALG000000009312	16,64
<i>betaglobin</i>	ENSGALG000000028273	16,64
<i>TPP1</i>	ENSGALG000000022706	16,64
<i>DPP7</i>	ENSGALG000000009105	16,70

Fig. S3: Half-life of mRNA table.

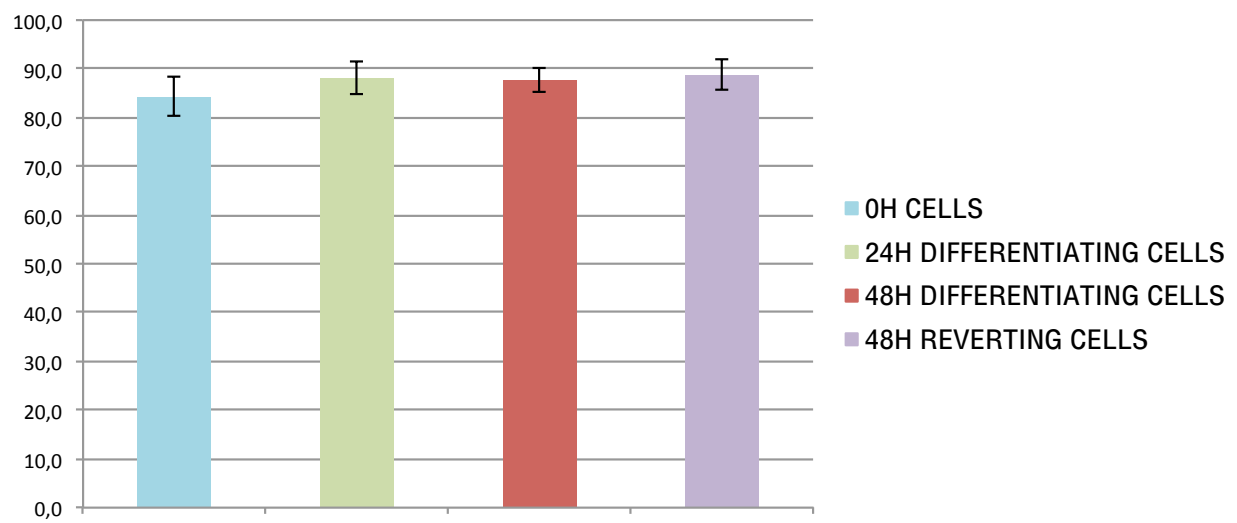


Fig. S4: Histograms of viability rate during reversion and differentiation processes measured by Trypan blue staining and counting in a Malassez chamber. Means were compared using Student t-tests.

<u>QC step</u>	<u>Filter value</u>	<u>Number of cells remaining</u>	<u>Number of features remaining</u>
Number of sequencing reads (per cell)	80000 reads	741 cells	/
Percentage of mapped reads (per cell)	46%	740 cells	/
Percent of reads mapped to ERCC (per cell)	<20%	710 cells	/
Number of detected genes (per cell)	233 genes	710 cells	/
Number of UMIs (per cell)	1584 UMIS	710 cells	/
Normalization	/	710 cells	8682 genes
Variable features selection	Vst 2000 most variable genes	710 cells	2000 genes

Fig. S5: Summary table of scRNAseq data filtering steps and threshold values for each step. Threshold determination is explained in methods.