

(A)

Culture condition	1w	2w	3w	4w	5w	6w	7w	8w	9w	10w	11w	12w
mTeSR1	2/2											
mTeSR1→RPMI 4w	0/0	2/2										
mTeSR1→RPMI 8w	0/0	2/2										
mTeSR1→RPMI 12w	0/2	0/2	1/2	2/2								
mTeSR1→RPMI 16w	0/2	0/2	0/2	0/2	0/2	0/2	0/2	-	1/2	1/2	2/2	
mTeSR1→RPMI 20w	0/2	0/2	0/2	0/2	0/2	0/2	0/2	0/2	0/2	0/2	1/2	2/2

(B)

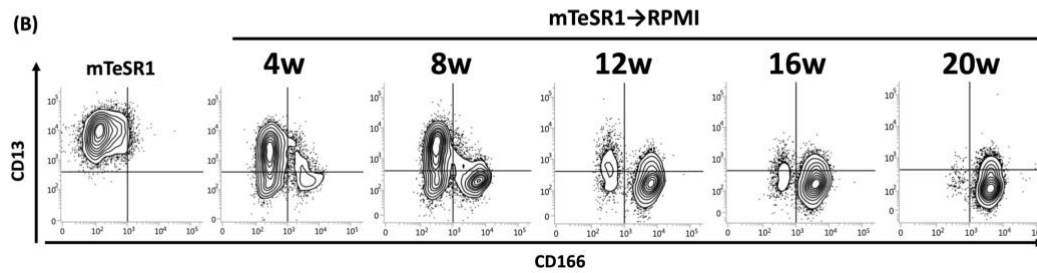


Fig. S1: Changes in tumorigenicity and CD13/CD166 phenotype after transferring cells from mTeSR1 to RPMI.

(A) Tumorigenicity of 5×10^6 cells injected subcutaneously to both lateral sides of a recipient mouse. The cells were cultured for 0, 4, 8, 12, 16, or 20 weeks after transfer from mTeSR1 to RPMI. Tumor formation was examined weekly ($n = 2$).

(B) CD13 and CD166 expression was analyzed by flow cytometry with time after transfer from mTeSR1 to RPMI.

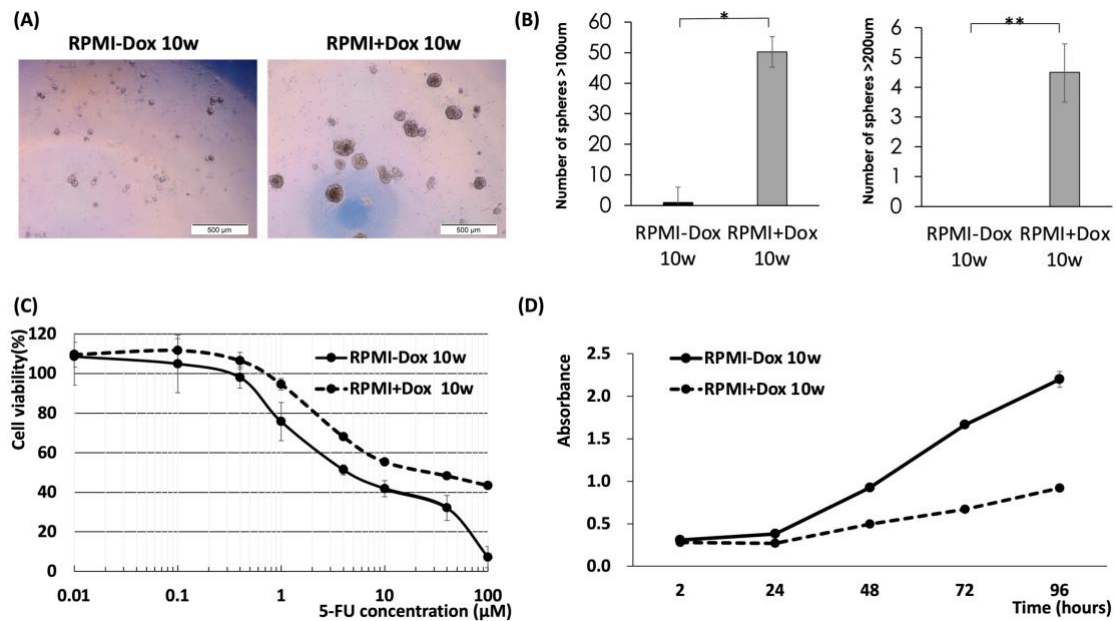


Fig. S2: Overexpression of the transduced nine genes supports maintenance of the CSC characteristics of 9g-Li-7 in RPMI culture.

9g-Li-7 cells were cultured for 10 weeks after switching to RPMI with or without Doxycycline.

(A) and (B) spheroid forming assay. 1×10^4 cells were seeded into a 96-well NanoCulture plate-MS and the numbers of spheroids with a diameter greater than 100 μm or 200 μm were counted on day 15 using a microscope. (A) Spheroid morphology. Magnification, x40. (B) Number of spheroids over 100 μm and 200 μm. Values are means $\pm$ SD of 4 wells. (*p = 0.0002, **p = 0.003).

(C) Chemosensitivity assay. 5×10^3 cells were seeded into a 96-well flat bottom plate and incubated at 37°C overnight. Medium was replaced with fresh medium containing different concentrations of 5-FU; cell viabilities were measured as absorbance 72 hours later using Cell Counting Kit-8. Values are means $\pm$ SD of 3 wells.

(D) Proliferation assay. 5×10^3 cells were seeded into a 96-well flat bottom plate and cell viabilities were measured as absorbance 2, 24, 48, 72, and 96 hours later using Cell Counting Kit-8. Values are means $\pm$ SD of 3 wells.

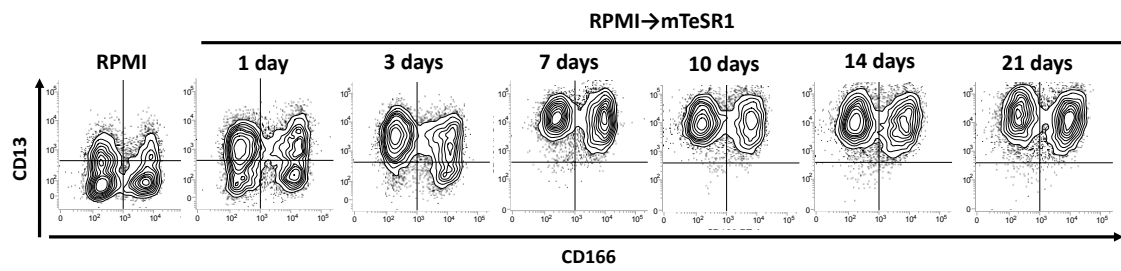


Fig. S3: Changes in CD13 and CD166 expression profiles over time after changing media to mTeSR1.

Li-7 cells cultured in RPMI were switched to mTeSR1 and expression of CD13 and CD166 was analyzed with time by flow cytometry.