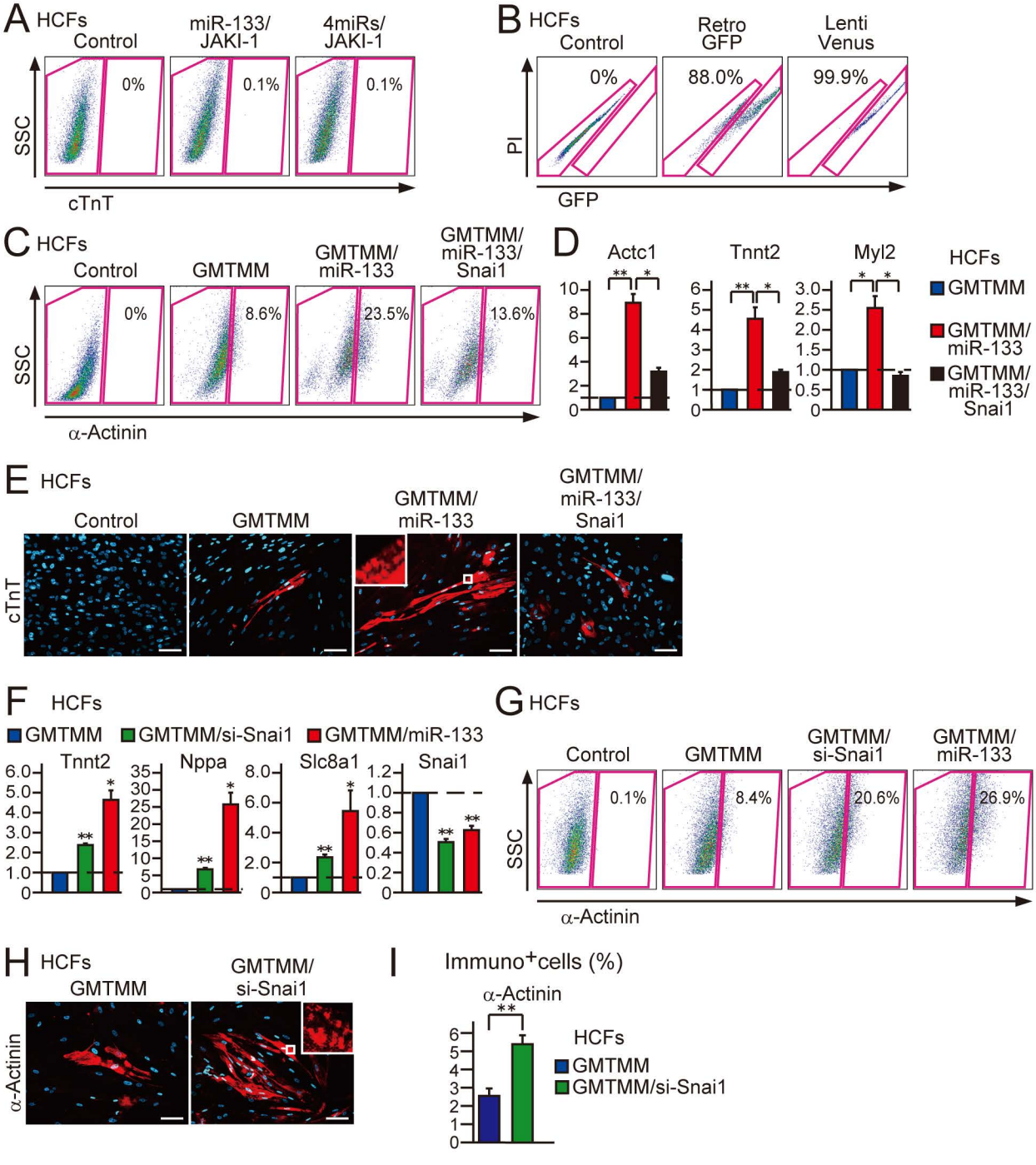
A
HCFs
Control
miR-133/
JAKI-1
4miRs/
JAKI-1
0%
0.1%
0.1%
SSC
cTnT
B
HCFs
Control
Retro
GFP
Lenti
Venus
0%
88.0%
99.9%
PI
GFP
C
HCFs
Control
GMTMM
GMTMM/
miR-133
GMTMM/
miR-133/
Snai1
0%
8.6%
23.5%
13.6%
SSC
α-Actinin
D
Actc1
Tnnt2
Myl2
HCFs
GMTMM
GMTMM/
miR-133
GMTMM/
miR-133/
Snai1
E
HCFs
Control
GMTMM
GMTMM/
miR-133
GMTMM/
miR-133/
Snai1
cTnT
F
HCFs
GMTMM
GMTMM/si-Snai1
GMTMM/miR-133
Tnnt2
Nppa
Slc8a1
Snai1
G
HCFs
Control
GMTMM
GMTMM/
si-Snai1
GMTMM/
miR-133
0.1%
8.4%
20.6%
26.9%
SSC
α-Actinin
H
HCFs
GMTMM
GMTMM/
si-Snai1
α-Actinin
I
Immuno+cells (%)
α-Actinin
HCFs
GMTMM
GMTMM/si-Snai1

Figure S4. Snai1 Suppression Increases Cardiac Gene Expression in Human Cardiac Reprogramming

(A) FACS analyses for $cTnT^+$ cells. Cells were analyzed 1 week after miR-133 or 4miRs transfection with JAKI-1 treatment in HCFs.

(B) Transduction efficiency of pantropic retrovirus and lentivirus in HCFs.

(C) FACS analyses for α-$actinin^+$ cells in HCFs 1 week after GMTMM, GMTMM/miR-133, or GMTMM/miR-133/Snai1 transduction.

(D) QRT-PCR analyses for relative mRNA expression of cardiac genes in HCFs transduced with GMTMM, GMTMM/miR-133, or GMTMM/miR-133/Snai1 (n = 3). See also **Figure 7H**.

(E) Immunocytochemisty for cTnT in HCFs transduced with GMTMM, GMTMM/miR-133, or GMTMM/miR-133/Snai1.

(F) Relative mRNA expression of cardiac genes (*Tnnt2, Nppa, Slc8a1*) and *Snai1* in HCFs transduced with GMTMM, GMTMM/si-Snai1, or GMTMM/miR-133 (n = 3).

(G) FACS analyses for α-$actinin^+$ cells. Snai1 suppression with GMTMM increased α-$actinin^+$ cells.

(H, I) Immunocytochemisty for α-actinin and DAPI. High-magnification view in inset shows sarcomeric organization. Snai1 suppression increased cardiac protein expression in GMTMM-transduced HCFs (I, n = 10).

All data are presented as means ± SEM. **, $P < 0.01$; *, $P < 0.05$ vs. relevant control. Scale bars, 100 μm.