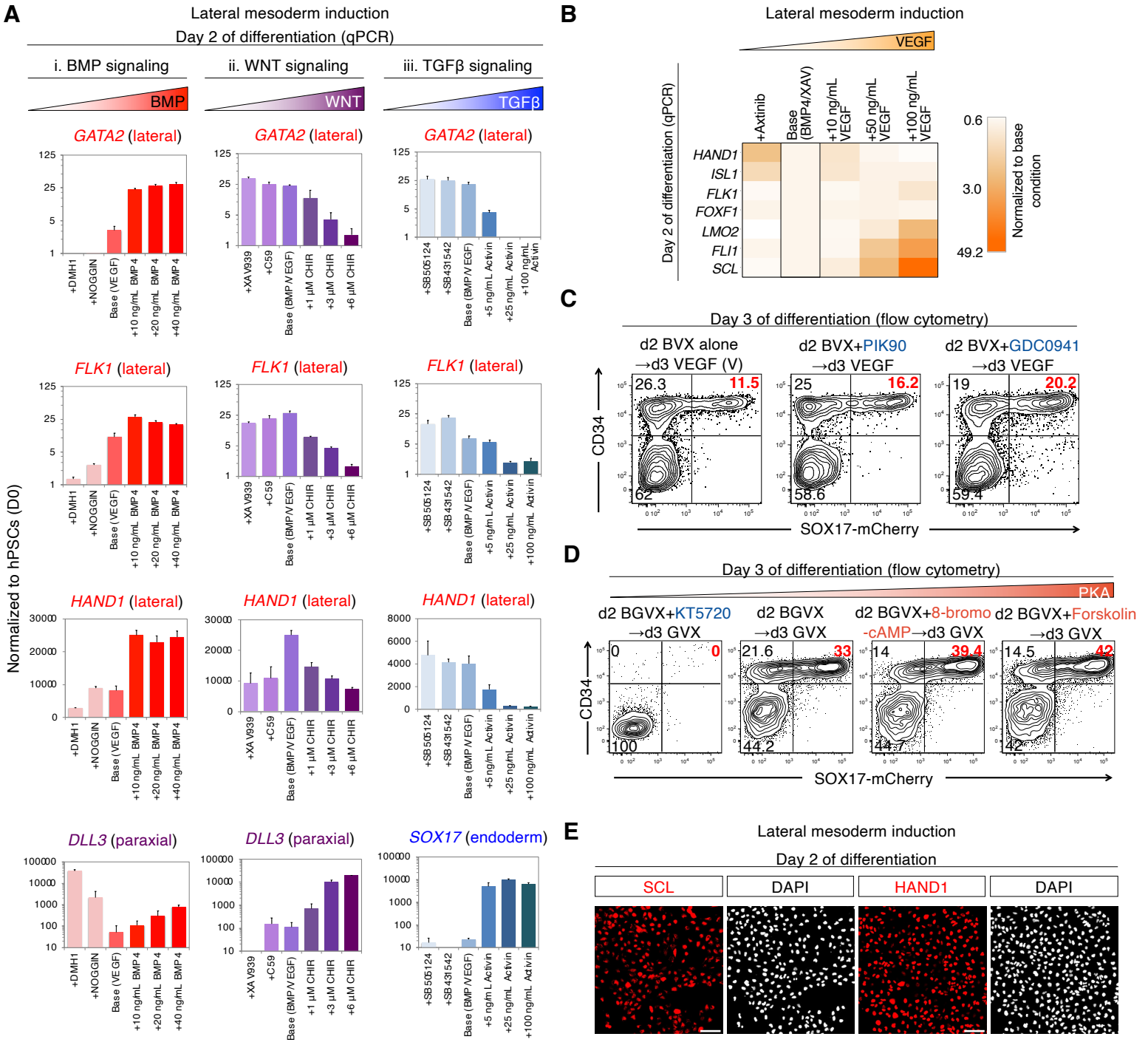
# Figure S1


A
Lateral mesoderm induction
Day 2 of differentiation (qPCR)
i. BMP signaling
ii. WNT signaling
iii. TGFβ signaling
BMP
WNT
TGFβ
GATA2 (lateral)
FLK1 (lateral)
HAND1 (lateral)
DLL3 (paraxial)
SOX17 (endoderm)
Normalized to hPSCs (D0)
+DMH1
+NOGGIN
Base (VEGF)
+10 ng/mL BMP4
+20 ng/mL BMP4
+40 ng/mL BMP4
+XAV939
+C59
Base (BMP/VEGF)
+1 μM CHIR
+3 μM CHIR
+6 μM CHIR
+SB505124
+SB431542
+5 ng/mL Activin
+25 ng/mL Activin
+100 ng/mL Activin
B
Lateral mesoderm induction
VEGF
Day 2 of differentiation (qPCR)
+Axtinib
Base (BMP4/XAV)
+10 ng/mL VEGF
+50 ng/mL VEGF
+100 ng/mL VEGF
HAND1
ISL1
FLK1
FOXF1
LMO2
FLI1
SCL
0.6
3.0
49.2
Normalized to base condition
C
Day 3 of differentiation (flow cytometry)
d2 BVX alone →d3 VEGF (V)
d2 BVX+PIK90 →d3 VEGF
d2 BVX+GDC0941 →d3 VEGF
26.3
11.5
62
25
16.2
58.6
19
20.2
59.4
CD34
SOX17-mCherry
D
Day 3 of differentiation (flow cytometry)
PKA
d2 BGVX+KT5720 →d3 GVX
d2 BGVX →d3 GVX
d2 BGVX+8-bromo -cAMP→d3 GVX
d2 BGVX+Forskolin →d3 GVX
0
0
100
21.6
33
44.2
14
39.4
44.7
14.5
42
42
CD34
SOX17-mCherry
E
Lateral mesoderm induction
Day 2 of differentiation
SCL
DAPI
HAND1
DAPI