

Supplementary information, Table S1 List of bioactive small molecules examined for their effects on hESC-derived EC differentiation

1. Growth factors and Cytokines:

EGF [10 ng/mL]	Angiopoietin-1 [100 ng/mL]
IGF-1 [50 ng/mL]	Erythropoietin [10 ng/mL]
IGF-BP1 [100 ng/mL]	Endostatin [1 µg/mL]
SDF-1 [40 ng/mL]	G-CSF [1 µg/mL]
HGF [40 ng/mL]	GM-CSF [5 ng/mL]
PLGF [25 ng/mL]	cAMP [1 mM]
PDGF-AA, -BB [10 ng/mL]	cGMP [100 µM]
bFGF [8 ng/mL]	BMP2 [20 ng/mL]
FGF-4, -10, -16 [25 ng/mL]	BMP4 [20 ng/mL]
VEGF-A [50 ng/mL]	Activin A [10 ng/mL]
VEGF-B, -C [0.1–1.0 µg/mL]	TNF-α [20 ng/mL]
TGF-β1, -β2 [5 ng/mL]	IL-1a, 6, 8, 10, -12 [1.0–10 ng/mL]
β-NGF [100 ng/mL]	IP-10 [200 ng/mL]
CTGF [25 ng/mL]	TIMP-2 [1 µg/mL]
SCGF-α, -β [100 ng/mL]	IFN-γ [10 ng/mL]

2. Signaling pathway inhibitors/enhancers:

TGFβ receptor inhibitor (SB431542) [10 µM]
Wnt signaling inhibitor (dkk-1) [25 ng/mL]
Wnt signaling enhancer (Wnt-3a) [1 µg/mL]
BMP signaling inhibitor (Noggin) [100 ng/mL]
PI3-Kinase inhibitor (LY294002) [10 µM]
Notch signaling inhibitor (DAPT) [10 µM]
Notch signaling enhancer (rhJagged1/Delta-like ligand-4) [50 ng/mL]
GSK-3β inhibitor (Bio/CP21R7) [1 µM/5 µM]
Insulin RTK activator (Demethylasterriquinone) [100 µM]
ERK signaling inhibitor (PD98059) [10 µM]
JNK signaling inhibitor (SP600125) [1 µM]
p38 MAPK signaling inhibitor (SB203580) [10 µM]
JNK/SAPK/p38 MAPK activator (Anisomycin) [50 ng/mL]
Selective JAK3 inhibitor (ZM449829) [50 µM]
STAT signaling inhibitor (Cucurbitacin I) [100 ng/mL]
IL-1 receptor antagonist (rhIL-1Ra) [1 µg/mL]
Hedgehog signaling enhancer (Purmorphamine) [1 µM]
Hedgehog signaling inhibitor (Cyclopamine) [5 µM]
mTOR inhibitor (Rapamycin) [100 ng/mL]
JAK2, Flt3 and TrkA inhibitor (Lestaurtinib) [1–100 µM]
VEGF receptor inhibitor (Suramine) [100 µg/mL]