

**Supplementary information, Table S2** Serum/Feeder-Free Culture Methods for hPSCs differentiation into endothelial lineage cells

Author	Journal (Year)	Differentiation period	Embryoid body formation	Specific factors inducing ECs		Definition of the harvested EC (or endothelial lineage)	Harvest method	Efficiency (%EC per total differentiating cells) at harvest	EC yield derived from 1 PSC (on day 5-6/ day12-14)	Proof of in vivo vascular formation
				Phase 1 (mesodermal specification)	Phase 2 (vascular commitment)					
Levenberg S et al	Proc Natl Acad Sci USA (2002)	13 days	(+)			CD31 <sup>+</sup>	FACS	2%	undetermined	(-)
Wang L et al	Immunity (2004)	10 days	(+)		VEGF-A, pituitary extract	CD31 <sup>+</sup> VE-cadherin <sup>+</sup>	FACS	few	undetermined	(-)
Lu S et al	Nat Methods (2007)	6 days	(+)	BMP4, VEGF-A	BMP4, VEGF-A, SCF, Flt3 ligand, Thrombopoietin	Formation of a hemangioblast colony	manual	0.5%	undetermined	(+)
Goldman O et al	Stem Cells (2009)	12 days	(+)	BMP4, SCF, Flt3 ligand, IL3, IL6, G-CSF, VEGF-A	SCF, Flt3 ligand, IL3, IL6, G-CSF, VEGF-A	VE-cadherin <sup>+</sup> KDR <sup>+</sup>	FACS	10%	undetermined	(-)
Bai H et al	J Cell Biochem (2010)	10-12 days	(-)	BMP4, bFGF, VEGF-A	BMP4, bFGF, VEGF-A	CD31 <sup>+</sup> (or CD31 <sup>+</sup> CD34 <sup>+</sup> )	FACS/MACS	10.7%	0.2/0.3	(-)

James D et al	Nat Biotechnol (2010)	14 days (20 days)	(+)	BMP4, Activin-A,	VEGF-A, bFGF, TGFβI	CD31 <sup>+</sup> VE-cadherin <sup>+</sup>	MACS	1.8%	unknown/1.2 (7.2 on day 20)	(+)
Tatsumi R et al	Cell Transplant (2011)	5 days	(-)	GSK-3βI	VEGF-A	VE-cadherin <sup>+</sup>	MACS	20%	0.2/unknown	(-)
Adams WJ et al	Stem Cell Reports (2013)	10 days	(+)	*20% fetal calf serum	*20% fetal calf serum	CD31 <sup>+</sup> VE-cadherin <sup>+</sup>	MACS/FACS	18%	undetermined	(-)
<b>Sahara M et al</b>		<b>6 days</b>	(-)	<b>BMP4, GSK-3βI</b>	<b>VEGF-A, Notch inhibitor (DAPT)</b>	<b>CD31<sup>+</sup>VE-cadherin<sup>+</sup> CD34<sup>+</sup>CD14<sup>-</sup></b>	<b>FACS</b>	<b>50%</b>	<b>2.5/20 (140 on day 20)</b>	<b>(+)</b>