Effect of human platelet lysate on the differentiation ability of human adipose-derived stem cells cultured on ECM-coated surfaces

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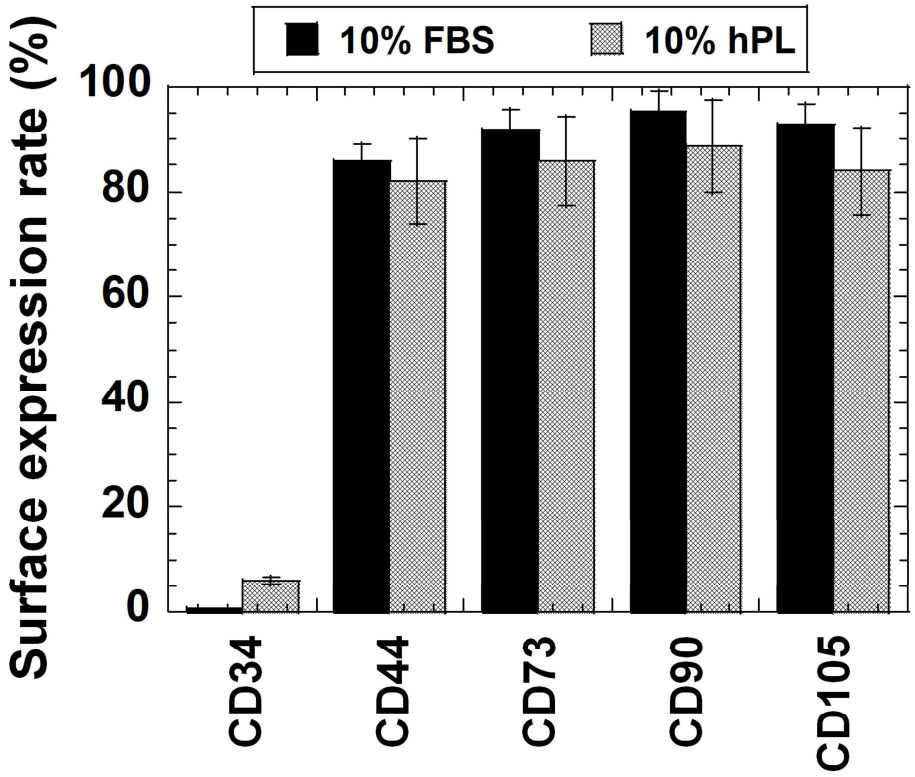
Supplementary Table 1 Materials used in this study.

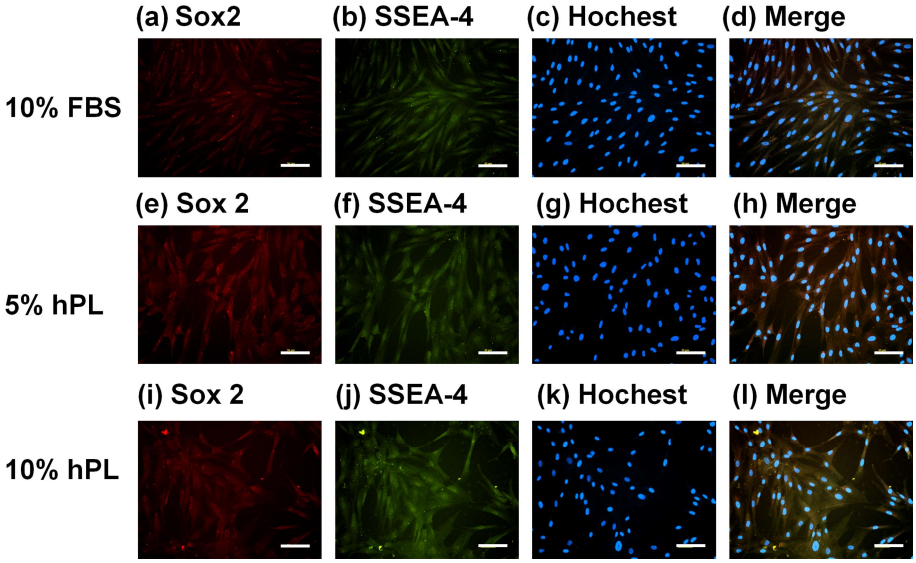
Materials	Abbreviation	Catalog No.	Company
	ECM		
Matrigel	Matrigel	#354230	Corning (Corning, NY, USA)
Fibronectin, human	FN	#356008	Corning (Corning, NY, USA)
Recombinant vitronectin	rVN	A14700	Thermo Fisher Scientific Inc. (Waltham, MA, USA)
	Cell culture dishes		
6-well tissue culture polystyrene plate	TCPS	#353046	Corning (Corning, NY, USA)
	Chemicals		
SensoLyte pNPP Alkaline Phosphatase Assay Kit	ALP kit	AS-72146	AnaSpec (Fremont, CA, USA)
	Cell culture medium and component		
DMEM	DMEM	D5648-10x1L	Sigma-Aldrich (St. Louis, MO, USA)
FBS	FBS	04-001-1A	Biological Industries, Kibbutz Beit-Haemek, Israel
Osteogenic differentiation medium	Osteogenic differentiation medium	A2921201	StemCell Research Laboratories (Carlsbad, CA, USA)
Chondrogenic differentiation medium	Chondrogenic differentiation medium	PT-3003	Lonza (Basel, Switzerland)
Hoechst 33342	Hoechst	PA-3014	Lonza (Basel, Switzerland)
Aqueous silver nitrate	Aqueous silver nitrate	S7276	Sigma-Aldrich (St. Louis, MO, USA)
Alcian blue staining solution	Alcian blue staining solution	TMS-010-C	Merck KGaA (Darmstadt, Germany)
	Surface markers		
7-AAD Viability dye	7-AAD	559925	BD Biosciences (Franklin Lakes, NJ, USA)
PE Mouse IgG1κ, isotype control	PE isotype	555749	BD Biosciences (Franklin Lakes, NJ, USA)
FITC Mouse IgG1κ, isotype control	FITC isotype	555748	BD Biosciences (Franklin Lakes, NJ, USA)
FITC Mouse IgG2bκ, isotype control	FITC isotype	555742	BD Biosciences (Franklin Lakes, NJ, USA)
FITC mouse anti-human CD34	FITC anti-CD34	555821	BD Biosciences (Franklin Lakes, NJ, USA)
FITC mouse anti-human CD44	FITC anti-CD44	555478	BD Biosciences (Franklin Lakes, NJ, USA)
PE mouse Anti-Human CD73	PE anti-CD73	550257	BD Biosciences (Franklin Lakes, NJ, USA)
PE mouse anti-human CD90	PE anti-CD90	555596	BD Biosciences (Franklin Lakes, NJ, USA)
PE mouse anti-human CD105	PE anti-CD105	560839	BD Biosciences (Franklin Lakes, NJ, USA)

Supplementary Table 1 (continued)

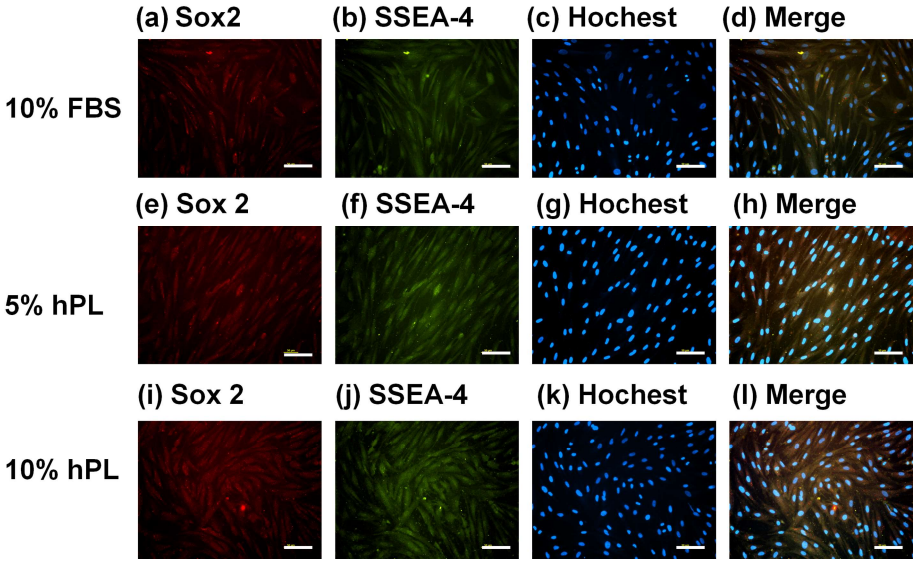
Materials	Abbreviation	Catalog No.	Company
Antibodies			
Anti-Sox2 rabbit antibody IgG	Anti-Sox2 antibody	48-1400	Thermo Fisher Scientific Inc. (Waltham, MA, USA)
Anti-SSEA-4 mouse antibody IgG	Anti-SSEA4 antibody	A7811	Abcam (Milton, Cambridge, UK)
Alexa Fluor® 555 goat anti-rabbit IgG (H+L) cross-adsorbed secondary antibody	Alexa Fluor® 555 anti-rabbit IgG secondary antibody	A21429	Thermo Fisher Scientific Inc. (Waltham, MA, USA)
Alexa Fluor® 488 goat anti-mouse IgG (H+L) cross-adsorbed secondary antibody	Alexa Fluor 488 goat anti-mouse IgG secondary antibody	A11029	Thermo Fisher Scientific Inc. (Waltham, MA, USA)
Mouse IgG1 Isotype antibody	Isotype-control	MA5-14453	Thermo Fisher Scientific Inc. (Waltham, MA, USA)
Gene expression component			
RNA extract kit	Total RNA Mini Kit	NR-S050	NovelGene Biotech Corporation (Taipei, Taiwan)
Reverse transcription	SuperScript First-Stand Reverse Transcriptase	11904-018	Invitrogen Corporation (Carlsbad, CA, USA)
qPCR reagent	TaqMan Fast Universal PCR Master Mix	4352042	Applied Biosystems (USA)
qPCR probe	GAPDH	Hs03929097_g1	Thermo Fisher Scientific Inc. (Waltham, MA USA)
qPCR probe	Oct4	Hs01895061-u1	Thermo Fisher Scientific Inc. (Waltham, MA USA)
qPCR probe	Nanog	Hs03929097_g1	Thermo Fisher Scientific Inc. (Waltham, MA USA)
qPCR probe	Sox2	Hs00602736_s1	Thermo Fisher Scientific Inc. (Waltham, MA USA)



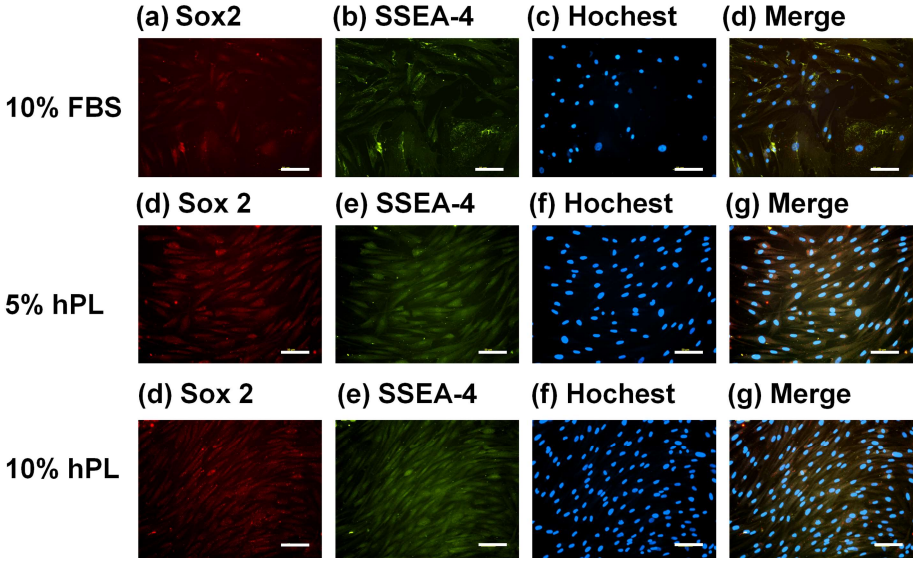
Supplementary Fig. 1. Surface marker expression of hADSCs after culture on TCPS dishes in 10% FBS and 10% hPL for 3 passages.



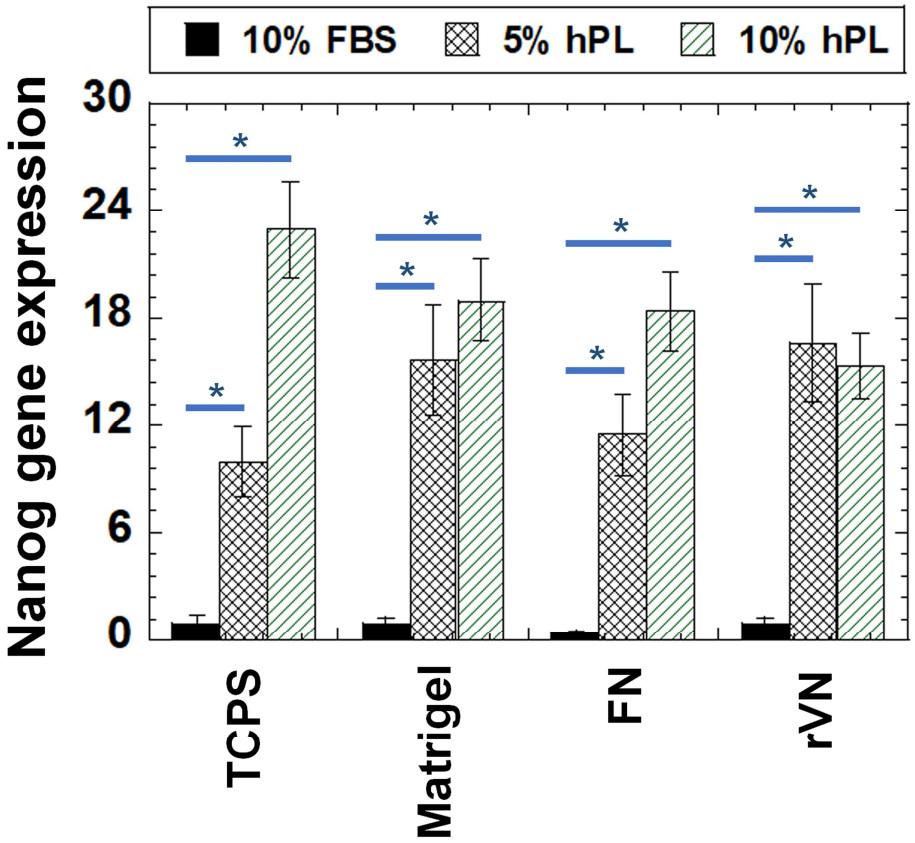
Supplementary Fig. 2. Expression of pluripotency protein (Sox2 (red; a, e, i) and SSEA-4 (green; b, f, j)) expression on hADSCs after hADSC culture in uncoated TCPS dishes in 10% FBS (a-d), 5% hPL (e-h), and 10% hPL (i-l) for 3 passages. Nuclear staining is performed with Hoechst 33342 (c, g, k). Merged images of a-c, e-g, and i-k are shown in d, h, and l, respectively. Scale bar indicates 100 μm.



Supplementary Fig. 3. Expression of pluripotency protein (Sox2 (red; a, e, i) and SSEA-4 (green; b, f, j)) expression on hADSCs after hADSC culture in Matrigel-coated dishes in 10% FBS (a-d), 5% hPL (e-h), and 10% hPL (i-l) for 3 passages. Nuclear staining is performed with Hoechst 33342 (c, g, k). Merged images of a-c, e-g, and i-k are shown in d, h, and l, respectively. Scale bar indicates 100 μm.



Supplementary Fig. 4. Expression of pluripotency protein (Sox2 (red; a, e, i) and SSEA-4 (green; b, f, j)) expression on hADSCs after hADSC culture in FN-coated dishes in 10% FBS (a-d), 5% hPL (e-h), and 10% hPL (i-l) for 3 passages. Nuclear staining is performed with Hoechst 33342 (c, g, k). Merged images of a-c, e-g, and i-k are shown in d, h, and l, respectively. Scale bar indicates 100 μm.



Supplementary Fig. 5. *Nanog* expression in hADSCs after hADSC culture in uncoated TCPS and ECM-coated dishes in 10% FBS, 5% hPL, and 10% hPL media for 3 passages.