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Supplemental data

Supplemental Table S1. Description of antibodies and dyes used

Antibody	Fluorophore	Clone	Isotype	Source
CD3	PE	UCHT1	IgG1-PE	BD
CD14	PE	MφP9	IgG2b-PE	BD
CD19	PE	4G7	IgG1-PE	BD
CD31	PE	MBC78.2	IgG1-PE	BD
CD34	PE	8G12	IgG1-PE	BD
CD45	APC	F10-89-4	IgG2a-APC	Caprico
HLA-DR	APC	L243	IgG2a-APC	Caprico
CD73	PeCy7	TY/11.8	IgG1-PeCy7	Biolegend
CD90	FITC	F15-42-1	IgG1-FITC	Caprico
CD105	APC	43A3	IgG1-APC	Biolegend
Stro-1	APC	STRO-1	IgM-APC	ThermoFisher
7AAD[1]	--	--	--	Invitrogen

[1]Abbreviations: 7-AAD, 7-aminoactinomycin; PE, phycoerythrin; APC, allophycocyanin; PeCy7, phycoerythrin-cyanin 7; FITC, fluorescein isothiocyanate.

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Supplemental Table S2. Description of primers used

Gene	Primer Sequence	Reference
Fatty acid binding protein 4 (FABP4)	F: 5'-ATACTGGGCCAGGAATTTGAC-3' R: 5'-CGCATTCCACCACCAGTTTA-3'	1
Lipoprotein lipase (LPL)	F: 5'-CTTGGAGATGTGGACCAGC-3' R: 5'-GTGCCATACAGAGAAATCTC-3'	2
Osteonectin (ON)	F: 5'-CCCATTGGCGAGTTTGAGAA-3' R: 5'-GATGTATTTGCAAGGCCCGA-3'	2
Osteopontin (OPN)	F: 5'-ACTGATTTTCCCACGGAC-3' R: 5'-ATGGCTGTGGAATTCACG-3'	2
Aggrecan (ACAN)	F: 5'-TCGAGGACAGCGAGGCC-3' R: 5'-TCGAGGGTGTAGCGTGTAGAGA-3'	1
Collagen Type-1	F: 5'-CCGCCGCTTCACCTACAGC-3' R: 5'-TTTTGTATTCAATCACTGTCTTGCC-3'	1
Collagen Type-2	F: 5'-GGCAATAGCAGGTTCACGTACA-3' R: 5'-CGATAACAGTCTTGCCCCACTT-3'	1
GAPDH	F: 5'-ATGGGGAAGGTGAAGGTCG-3' R: 5'-TAAAAGCAGCCCTGGTGACC-3'	1
OCT4	F: 5'-ACATCAAAGCTCTGCAGAAAGAACT-3' R: 5'-CTGAATACCTTCCCAAATAGAACCC-3'	1
SOX9	F: 5'-CACACAGCTCACTCGACCTTG-3' R: 5'-TTCGGTTATTTTTAGGATCATCTCG-3'	1

1. Indrawattana et al. Growth factor combination for chondrogenic induction from human mesenchymal stem cell. Biochem Biophys Res Commun. 2004 Jul 30;320(3):914-9.

2. Patel et al. Mesenchymal stem cell population isolated from the subepithelial layer of umbilical cord tissue. Cell Transplant. 2013;22(3):513-9.

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Supplemental Figure S1

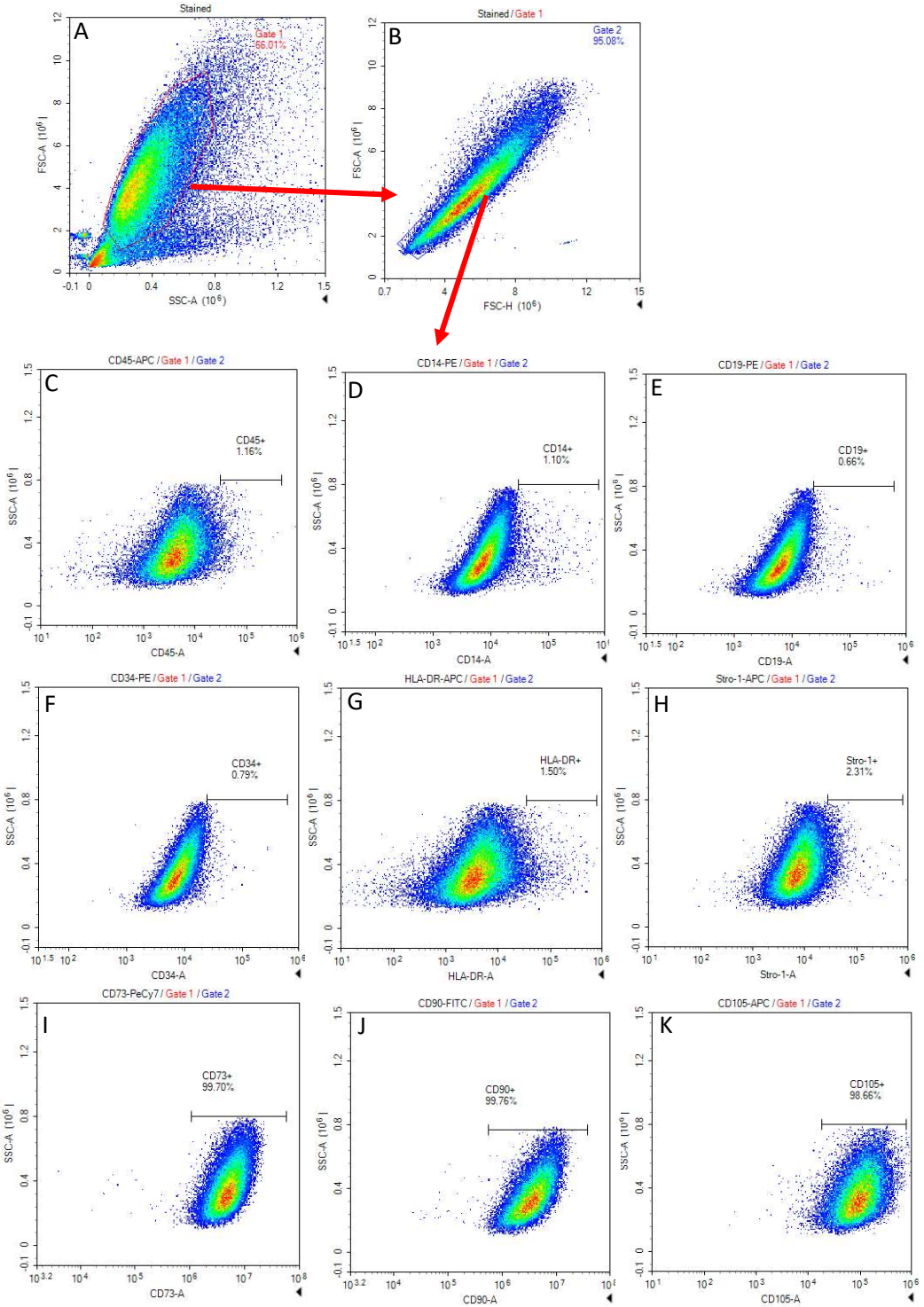

Figure S1. Representative flow cytometry dot plots demonstrating the gating strategy used to identify passaged MSC by size based on forward and side scatter (A) and then single cells by forward scatter area over height (B). Single cells were then analyzed for the indicated cell surface epitopes (H-K) after setting gates based on a negative signal using fluorescently conjugated isotype control antibodies (supplemental table S2).