Table S1. Surface marker expression in BM MSCs, SVCs, ASCs, committed preadipocytes and mature adipocytes.

	Marker		BM MSCs	MSCs (ISCT criteria)	SVCs (unsorted)	ASCs	Committed Preadipocytes	Adipocytes	*Marker expression pattern*
	Common name	Gene name or description							
	CD166	ALCAM	(72, 172)		(103)	(21, 86, 103, 152, 172, 245)			**Different between SVCs and ASCs**
	CD45	PTPRC; protein tyrosine phosphatase, receptor type C	(72, 81, 111, 119, 159, 172, 252)	(116)	(47, 49, 109, 158)	(21, 47, 81, 86, 96, 98, 109, 111, 120, 130, 145, 152, 170, 172, 245)	(24, 189)		
	vWF	von Willebrand factor	(72)		(105)	(47, 103, 121)			
	Lin	CD2, CD3, CD4, CD5, CD8, NK1.1, B220, Ter-119 and Gr-			(158, 189)	(98)	(189)		
Enriched in adipogenic ASCs or committed preadipocytes	*CD31*	PECAM-1	(72, 81, 111, 119, 172, 252)		(22, 47, 49, 103, 106, 107, 124, 161) (109)	(103) (172) (21, 22, 47, 81, 86, 98, 109, 111, 120, 121, 124, 245)	(161, 189)	(106, 161)	**Different between SVCs and ASCs** (but some inconsistent reports)
	CD34	CD34; Stem cell marker; CD62L receptor	(72, 81, 119, 159, 172, 252)	(116)	(22, 47, 49, 97, 103, 104, 106, 107, 109, 118, 124, 158, 159, 161, 163, 189)	(22, 86, 103, 109, 118, 124, 163, 172, 189, 245) (47, 81, 91, 98, 120, 121, 130, 145, 147, 152, 170, 244)	(24, 161, 189)	(106, 161)	
	CD117	c-kit; SCFR	(172, 252)		(163) (108)	(105) (172) (98, 147, 170)	(189)		
	CD11a	Integrin aL; LFA-1	(72)		(47) (108)	(86)			
	CD14	LPS-R	(72, 119, 159, 172)	(116)	(47, 161) (106, 109, 244)	(21, 81, 86, 109) (172)	(161)	(106, 161)	
	CD15	LewisX; SSEA-1	(72)		(106)	(147) (23)		(106)	
	CD73	NT5E; SH3	(72, 81, 111, 119, 172)	(116)	(103, 159, 244)	(81, 103, 111, 130, 145, 170, 172) (105)			
	CD133	AC133			(98) (108)	(105, 147, 170)			
	CD144	VE-cadherin			(22, 109) (103)	(22, 103, 109, 120, 121, 170)			
	CD146	MCAM (melanoma cell adhesion molecule)			(103, 124)	(21, 86, 121) (120, 124, 245)			
	SMA	Smooth muscle actin			(78, 121)	(22, 25, 121) (117)	(24, 25)		
	ABCG2	ABCG2			(97, 103) (108)	(103)			
Enriched in adipogenic ASCs or committed preadipocytes	*CD105*	Endoglin; SH2	(72, 81, 92, 111, 119, 159, 172, 252)	(116)	(103, 107, 108, 159, 163, 244)	(21, 81, 86, 92, 103, 105, 111, 130, 147, 152, 170, 172, 245) (49)	(24, 161, 189)	(161)	**Similar in ASCs and whole SVCs**
	CD140a	PDGFR-a			(108)	(22)	(196)		
	CD24	BA-1 (binds P-selectin)			(189) (may be very low % of total)		(189)		
	CD62L	L-selectin: LECAM-1	(72)		(108)				**Different between BM MSCs and SVCs or ASCs** (but some inconsistent reports)
	CD104	b4-integrin	(72)			(81)			
	CD106	VCAM-1	(72, 81, 172)		(108, 244)	172 (81, 245)			
	CD49d	α4-integrin; VLA-4	(172) (72, 81)		(108)	(81, 170, 172)			
	Stro-1		(81, 254)			(21, 81, 88) (86, 147)			
Enriched in adipogenic ASCs or committed	*CD29*	β1-integrin	(72, 81, 92, 172, 252)		(103, 108, 189, 244)	(81, 86, 92, 96, 103, 120, 152, 170, 172)	(189)		
	CD140b	PDGFR-b				(22, 121)	(24)		
	Sca-1	Ly-6A.2	(252)		(104, 135, 158)	(98, 120)	(24, 189)		
	CD9	p24; MRP-1	(72)			(86)			
	CD10	MME; neprilysin	(159, 172)		(47, 106)	(22, 47, 86, 96, 170, 172)		(106)	
	CD13	Aminopeptidase N; APN	(159, 172)		(47, 103, 106, 109, 159)	(22, 47, 81, 86, 96, 103, 109, 145, 147, 152, 170, 172)		(106)	

CD36	CD36; FAT; GPIV			(106)			(106)	**No differences across all cell types**
CD44	CD44; H-CAM; Pgp-1	(72, 81, 92, 159, 172, 252)		(47, 103, 159, 163, 244)	(21, 47, 81, 86, 92, 96, 98, 103, 120, 145, 147, 152, 170, 172)			
CD49a	α1-integrin; VLA-1	(72)		(103)	(103, 170)			
CD49b	α2-integrin; VLA-2	(72)		(108)	(147)			
CD49e	α5-integrin; VLA-5	(72)		(108)	(86, 96)			
CD51	αV-integrin (vitronectin receptor)	(72)		(108)				
CD54	ICAM-1	(72)		(163)	(86, 245)			
CD55	DAF			(106)	(86, 111)		(106)	
CD59	Protectin	(172)		(106)	(86, 96, 170, 172)		(106)	
CD61	b3-integrin	(72)		(108)				
CD63	CD63; Tspan30			(103)	(103)			
CD65	VIM-2			(106)			(106)	
CD71	TFRC (transferrin receptor)	(72, 81, 172)			(81, 172)			
CD90	(Thy-1)	(72, 81, 92, 111, 159, 172)	(116)	(47, 49, 103, 107, 108, 159, 163, 244)	(21, 22, 47, 81, 92, 96, 103, 105, 111, 124, 130, 147, 163, 170, 172, 245)	(163)		
CD120a	TNFR-I	(72, 172)			(172)		(253)	
CD124	IL-4R	(72, 172)			(172)			
CD271	L-NGFR			(118)	(118)			
3G5				(21)	(21)			
HLA-ABC		(159)		(108, 109, 159)	(86, 96, 109, 145, 245)			
NG2	chondroitin sulfate proteoglycan				(22, 121)	(24)		
CD3	T3			(47) (106)			(106)	
CD4	MHC class II co-receptor: T4	(72)		(106, 108)			(106)	
CD5	CD5; Ly-1			(106)			(106)	
CD8a	MHC I co-receptor: T8			(106, 108)			(106)	
CD11b	Integrin aM; Mac-1	(172)	(116)	(108)	(86, 96, 98, 172)	(24)		
CD11c	Integrin aX; p150; CR4			(108)	(86)			
CD18	b2-integrin	(72)		(108)	(86)			
CD19	B4		(116)	(106)			(106)	
CD20	Ms4a1; Ly-44			(106)			(106)	
CD38	T10; cyclic ADP ribose hydrolase			(106)			(106)	
CD48	Blast-1	(172)			(172)			
CD50	ICAM-3	(72)			(86)			
CD56	NCAM	(119)			(81, 86, 145)			
CD62E	E-selectin; ELAM-1	(72)			(81, 86)			
CD62P	P-selectin; PADGEM	(72)		(108)				
CD135	Flt3/Flk2	(172)			(172)			
HLA-DR		(111, 159)	(116)	(108, 159)	(86, 92, 96, 111, 145, 152, 245)			
CD2	CD58 ligand; LFA-2			(47)				**Expression only reported for one cell type**
CD49c	α3-integrin; VLA-3	(72)						
CD58	LFA-3	(72)						
CD102	ICAM-2	(72)						
CD138	Syndecan-1			(108)				
vimentin	Vim				(47)			
CD184	CXCR4				(145)			
CD243	MDR-1; p170; P-gp			(108)				
Flk-1	Flk-1				(120, 147)			
Ter-119	Ter-119					(24)		
CD16	Fc gamma RIIIA				(81)			
CD25	IL-2R	(72)						
CD41a	**gpIIb**			(108)				
CD49f	α6-integrin; VLA-6			(108)				
CD79	Component of BCR		(116)					

Table S1. Surface marker expression in BM MSCs, SVCs, ASCs, committed preadipocytes and mature adipocytes. Studies reporting positive expression are shown in red; those reporting negative expression are shown in green; and those reporting mixed results are shown in amber. Studies using cells isolated from mice or rats are shown underlined; all other studies used cells isolated from human tissues. Markers are grouped into common expression patterns, as indicated in the right hand column. Positive or negative expression of some markers is distinctive of more adipogenic ASCs, or of committed preadipocytes, as indicated on the left hand side. In some studies it is not clear whether the 'ASCs' studied are SVC subpopulations or whole, unsorted SVCs; however, we have tried to distinguish between these two cell populations for each study cited. It should also be noted that much more is likely known about surface marker expression in mature adipocytes; however, we have not included such studies here as this is beyond the scope of the present review. ISCT, International Society for Cellular Therapy.