

Supplementary Materials: A Comparative Analysis of the Wound Healing-related Heterogeneity of Adipose-derived Stem Cells Donors

Guoqiang Ren, Qiuyue Peng, Jeppe Emmersen, Vladimir Zachar, Trine Fink and Simone R. Porsborg

Table S1. The up-regulated gene information.

Gene Symbol	FPKM			ASC-105 / ASC-101		ASC-106 / ASC-101	
	ASC-101	ASC-105	ASC-106	log2	FDR	log2	FDR
LIMS4	1.43	3.39	3.26	1.25	0.000559	1.19	0.000991
POC1B-GALNT4	0	0.11	0.42	3.46	0.00556	5.39	0.00000000002
CORO7-PAM16	0	0.13	0.17	3.70	0.02	4.09	0.00311
FSBP	0.29	0.99	0.80	1.77	0.00000001	1.46	0.0000173
U2AF1L5	3.44	10.03	8.59	1.54	0.000000000037	1.32	0.00000003
LOC102724770*	0	2.23	1.48	7.80	0.000000000024	7.21	0.0000001
EFS*	2.69	11.17	7.90	2.05	4.1E-56	1.55	5.4E-26
SPON1*#	6.03	19.22	18.12	1.67	2.1E-140	1.59	5.64E-119
OLFM1	1.39	2.79	4.13	1.01	0.00478	1.57	0.000000001
LINC01638	2.69	6.39	8.79	1.25	0.00119	1.71	0.0000006
SLC12A7	0.61	2.25	1.85	1.88	1.9E-20	1.60	0.00000000000031
STAG3	0.22	0.58	0.46	1.40	0.00217	1.06	0.03
LOC107986352	0	0.13	0.23	3.70	0.01	4.52	0.000122
CORO1A	0.21	0.71	1.01	1.76	0.03	2.27	0.000223
LZTS1*	0.50	2.25	1.25	2.17	2.9E-26	1.32	0.0000002
GALNT5	3.56	7.62	8.41	1.10	2,00E-23	1.24	1.4E-36
MGAT4A	0.02	0.14	0.09	2.81	0.01	2.17	0.02
CHRNA5	0.08	0.30	0.36	1.91	0.02	2.17	0.0041
GBP5	0.08	0.39	0.33	2.29	0.000566	2.04	0.0041
HSPA12B	0.10	0.37	0.44	1.89	0.01	2.14	0.0041
WDR17	0.12	0.27	0.40	1.17	0.00000621	1.74	0.05
COL4A4*	0.04	0.31	1.46	2.95	9.9E-57	5.19	0.00000000088
COL10A1*	0.62	3.97	4.34	2.68	1.1E-42	2.81	4.2E-38
COL11A1*#	6.65	17.44	14.44	1.39	1.2E-72	1.12	1.43E-130
HAPLN1*	0	0.60	0.17	5.91	0.000451	4.09	0.000000000000061
TMEM37	0.04	0.54	0.35	3.75	0.03	3.13	0.0019
KRT80	0.08	0.32	0.33	2	0.0041	2.04	0.00568
PIK3R6*	0.08	0.46	0.71	2.52	0.0000007	3.15	0.000838
CDC42EP5#	6.31	21.57	19.81	1.77	4.8E-21	1.65	1.3E-26
TEKT4	0.17	0.88	0.58	2.37	0.02	1.77	0.00839
GPAT2	1.59	3.38	3.26	1.09	0.0000005	1.04	0.0000001
FGD5	0.33	1.11	0.67	1.75	0.0024	1.02	0.00000000021
SPAAR	0.29	2.12	0.89	2.87	0.02	1.62	0.000000006
COCH	0.43	1.19	1.25	1.47	0.0000697	1.54	0.000192
MEGF6	0.26	2.39	0.95	3.20	0.00000000002	1.87	2,00E-52
LCTL	1.74	3.95	3.48	1.18	0.000297	1	0.00000009
EPAS1*	3.56	7.40	7.92	1.06	1.5E-32	1.15	3.1E-27
ETS2	3.11	6.68	7.56	1.10	1.8E-27	1.28	6.6E-19
RNF152	0.10	0.40	0.27	2	0.00169	1.43	0.00119
FGF9*	0	0.11	0.11	3.46	0.01	3.46	0.01
FGFR2*	0.12	0.64	0.34	2.42	0.01	1.50	0.00000148

FGFR4*	0.12	0.39	0.48	1.70	0.00243	2	0.02
ITGA11*#	8.71	33.83	18.63	1.96	4.7E-75	1.10	0,00E+00
LIMCH1	0.19	1.27	0.67	2.74	0.0000005	1.82	8.2E-21
PDZD2*	0.12	0.24	0.26	1	0.00206	1.12	0.02
FLG	0.08	0.27	0.50	1.75	0.0000000000000000 37	2.64	0.0000124
FRMD4B	0.58	1.47	1.76	1.34	0.0000000000092	1.60	0.0000002
MTUS2	0.25	0.94	0.52	1.91	0.03	1.06	0.0000007
FMOD	4.01	15.95	8.61	1.99	1.3E-20	1.10	1.5E-92
PIK3R5	0.04	0.19	0.24	2.25	0.0042	2.58	0.03
ARHGAP30	0.02	0.16	0.14	3	0.03	2.81	0.02
FAM19A5	0.02	0.31	0.24	3.95	0.02	3.58	0.00329
GIMAP2	0.04	1.06	1.32	4.73	0.0000001	5.04	0.00000529
TIAM2	0.53	1.20	1.93	1.18	8.2E-19	1.86	0.00000171
GREM1*#	60.46	241.70	183.35	2.00	0	1.60	0,00E+00
GNDF	2.30	5.81	5.14	1.34	4.1E-23	1.16	3.6E-27
GJB2	0.31	1.23	0.97	1.99	0.00123	1.65	0.0000168
GNAL	0.22	0.59	0.45	1.42	0.02	1.03	0.000107
NHLRC4	0.18	0.57	0.52	1.66	0.05	1.53	0.03
CDRT4	0	0.51	0.39	5.67	0.000122	5.29	0.00000579
WDR62	0.46	0.93	1.27	1.02	0.000000004	1.47	0.00202
TRIB2	2.34	6.39	5.42	1.45	1,00E-20	1.21	9.9E-33
GUCA1B	0	0.21	0.19	0.02	4.39	0.02	4.25
HLA-DPA1	1.23	3.84	2.73	1.64	0.000000002	1.15	0.000271
HLA-DPB1	0.36	0.76	1.35	1.08	0.00739	1.91	0.000000002
IGSF3	0.15	0.35	0.60	1.22	0.00736	2	0.00000006
TSPAN33	0.03	0.22	0.27	2.87	0.03	3.17	0.05
FMN1	0.24	0.98	1.89	2.03	3.5E-21	2.98	1.4E-59
RBPMS2	0.43	1.21	1.55	1.49	0.00192	1.85	0.0000212
IL2RB	0.15	0.37	0.58	1.30	0.03	1.95	0.000117
ITGB8*	0.08	0.19	0.20	1.25	0.04	1.32	0.01
KCNJ15	1.82	5.05	4.50	1.47	6,00E-24	1.31	0.000000000000000029
FAM174B	0.50	1.12	1.45	1.16	0.00647	1.54	0.0000384
LY75	0	0.06	0.18	2.58	0.03	4.17	0.0000043
MARK1	0.31	0.69	0.62	1.15	0.02	1	0.02
MME#	31.88	70.20	86.26	1.14	5.25E-302	1.44	0,00E+00
MMP1#	0.13	31.71	63.18	7.93	0	8.92	0,00E+00
MMP9*#	4.11	21.62	36.24	2.40	2.33E-111	3.14	3.84E-242
MT1A	2.80	7.45	6.91	1.41	0.00493	1.30	0.02
TNFRSF11B*	0.13	0.90	0.97	2.79	0.00000609	2.90	0.00000168
STMN3#	7.27	14.89	16.83	1.03	1.5E-24	1.21	5,00E-34
ADA2#	0.85	5.86	4.28	2.79	8.2E-59	2.33	5.5E-34
PGM5*	0.27	1.04	0.91	1.95	0.00000177	1.75	0.0000567
SERPINA1	0.45	1.01	1.52	1.17	0.00269	1.76	0.0000007
SPA17	2.73	6.61	7.05	1.28	0.00000758	1.37	0.00000127
CLIC6	0.47	2.32	1.55	2.30	2,00E-20	1.72	0.000000003
SPET4	0.52	2.35	1.75	2.18	0.0000003	1.75	0.00000001
NMRK1	2.60	6.95	6.02	1.42	0.00000000000036	1.21	0.00000000000005
NLRP2	0.05	0.39	0.40	2.96	0.00025	3	0.000171
GPRC5C	0.56	2.46	1.40	2.14	0.00000000019	1.32	0.00542
PCDHB3*	0.05	0.30	0.24	2.58	0.00324	2.26	0.02
PCDHB2*	0.28	1.37	0.86	2.29	0.00000003	1.62	0.00107
ASPHD2	0.40	0.89	1.11	1.15	0.00479	1.47	0.000083
VANGL2	0.05	0.61	0.20	3.61	0.0000000000089	2	0.00684
TENM2*	0.23	6.69	7.17	4.86	1.42E-268	4.96	2.36E-282
PCDH19*	0.09	0.19	0.19	1.08	0.04	1.08	0.05

CADM3*	0.09	2.76	0.30	4.94	2.4E-38	1.74	0.00684
PTPRB*	0.24	0.67	0.48	1.48	0.0000106	1	0.00729
RARRES2#	7.05	62.86	52.14	3.16	5.96E-120	2.89	6.1E-87
MRPL23#	9.72	36.92	40.75	1.93	1.5E-40	2.07	1.1E-47
CCL11*	1.32	6.88	3.42	2.38	0.000000000000047	1.37	0.00148
GPSM3	1.46	3.61	3.14	1.31	0.000013	1.10	0.000605
SEMA3F	0.18	1.23	0.42	2.77	0.00000161	1.22	0.05
GREM2	1.30	5.10	5.32	1.97	9.4E-38	2.03	1.1E-39
CBWD6	1.77	3.77	4.60	1.09	0.0000446	1.38	0.0000707
LOC644634	0.07	0.43	0.28	2.62	0.000147	2	0.01
SLC1A4	4.03	12.27	12.24	1.61	3.5E-73	1.60	2.7E-72
WNK3	0.01	0.07	0.06	2.81	0.02	2.58	0.02
ACTR3C	0.17	0.56	0.96	1.72	0.00353	2.50	0.00000001
LRRC61	0.13	2.16	3.47	4.05	0.0000000000000000 93	4.74	4.3E-27
STAT4	0.56	1.48	1.37	1.40	0.0000647	1.29	0.000432
SULT1A1	0.44	1.56	1.49	1.83	0.00994	1.76	0.00183
TBX1*	0.35	2.82	4.08	3.01	0.0000000000000000 22	3.54	7.1E-27
TCF21	0.10	0.83	0.63	3.05	0.000508	2.66	0.000954
TLE2	1.51	4.27	3.27	1.50	0.0000000000000048	1.11	0.0000005
TNNT1	1.23	3.32	2.61	1.43	0.000131	1.09	0.02
TRPC3	0.01	0.33	0.15	5.04	0.0000575	3.91	0.02
TRPM2	0	0.14	0.09	3.81	0.03	3.17	0.04
RGPD8	1.07	3.91	5.28	1.87	3.8E-47	2.30	1.8E-82
NUTM2D	0.12	0.35	0.29	1.54	0.00551	1.27	0.03
ALDH5A1	0.11	0.30	0.27	1.45	0.03	1.30	0.05
FSD1	0.77	2.28	1.67	1.57	0.0000117	1.12	0.00614
CCNJL	0.11	0.35	0.41	1.67	0.04	1.90	0.00924
CLMN	0.16	1.01	0.72	2.66	0.00000000018	2.17	0.00000932
SVEP1*	0.74	2.51	4.46	1.76	4.4E-48	2.59	2.66E-135
MYO15B	0.10	0.26	0.28	1.38	0.02	1.49	0.02
PDCD1LG2	0.22	0.70	1.14	1.67	0.00674	2.37	0.00000247
SLC19A3	0.02	0.16	0.20	3	0.02	3.32	0.00533
ITIH5	0.24	0.82	0.51	1.77	0.000000000047	1.09	0.00105
LIMD2	2.66	9.84	6.94	1.89	1.3E-20	1.38	0.00000004
AP3B2	0.10	0.57	0.50	2.51	0.0000124	2.32	0.000135
LRRC3	0.35	0.87	0.71	1.31	0.0000114	1.02	0.00166
TCF7L1	1.67	3.46	3.37	1.05	0.0000006	1.01	0.00000189
CCDC3	0.26	0.88	0.59	1.76	0.00022	1.18	0.03
FAM167A	0.21	1.08	0.72	2.36	0.00000000002	1.78	0.0000329
ATG10	1.37	3.53	3.02	1.37	0.000837	1.14	0.00785
SYT15	0.37	0.90	0.89	1.28	0.0000139	1.27	0.000308
OBSCN	0.05	0.12	0.10	1.26	0.000095	1	0.00513
ACSS1	0.60	1.40	1.94	1.22	0.0000429	1.69	0.000000000035
ST6GAL2	0.09	0.23	0.22	1.35	0.00349	1.29	0.00349
FNDC1	0.56	8.02	4.42	3.84	4.17E-182	2.98	4,00E-78
PYROXD2	2.12	5.93	5.16	1.48	0.000000000000003	1.28	0.000000000001
GAS7	3.31	7.73	8.12	1.22	5.1E-56	1.29	3.6E-62
DISP2	0.16	0.74	0.68	2.21	0.00000007	2.09	0.0000008
ZNF439	0.16	0.49	0.57	1.61	0.03	1.83	0.00821
RASL10B	0.12	0.34	0.44	1.50	0.03	1.87	0.00383
DEPDC7	1.70	3.73	4.96	1.13	0.0000168	1.54	0.00000000011
HELB	0.51	1.06	1.02	1.06	0.00195	1	0.000605
SLIT2#	10.73	21.61	32.82	1.01	4.94E-107	1.61	0,00E+00
LENG9	0.91	1.85	1.88	1.02	0.00627	1.05	0.00449

GNG8	0.18	0.44	0.71	1.29	0.03	1.98	0.000129
RPH3AL	0.23	0.87	1.04	1.92	0.000242	2.18	0.00000674
CD40	1.36	3.41	4.34	1.33	0.0000114	1.67	0.000000002
CELSR1*	0.16	1.10	0.39	2.78	3,00E-34	1.29	0.000701
TRIM14	0.89	2.66	3.98	1.58	0.0000000000000000 38	2.16	2.9E-35
NUAK1*#	6.82	27.15	14.97	1.99	0	1.13	1.7E-78
ARNT2	0.59	1.66	1.22	1.49	0.000000000000015	1.05	0.00000601
CDC25C	0.85	1.78	3.81	1.07	0.00611	2.16	0.000000000000032

ASC, adipose-derived stem cell; FPKM, fragments per kilobase of exon model per million reads mapped; FDR, the false discovery rate; *, 31 significantly upregulated genes involved in wound healing-related processes based on Figure 5B; #, 14 most significantly upregulated genes based on Figure 5C.