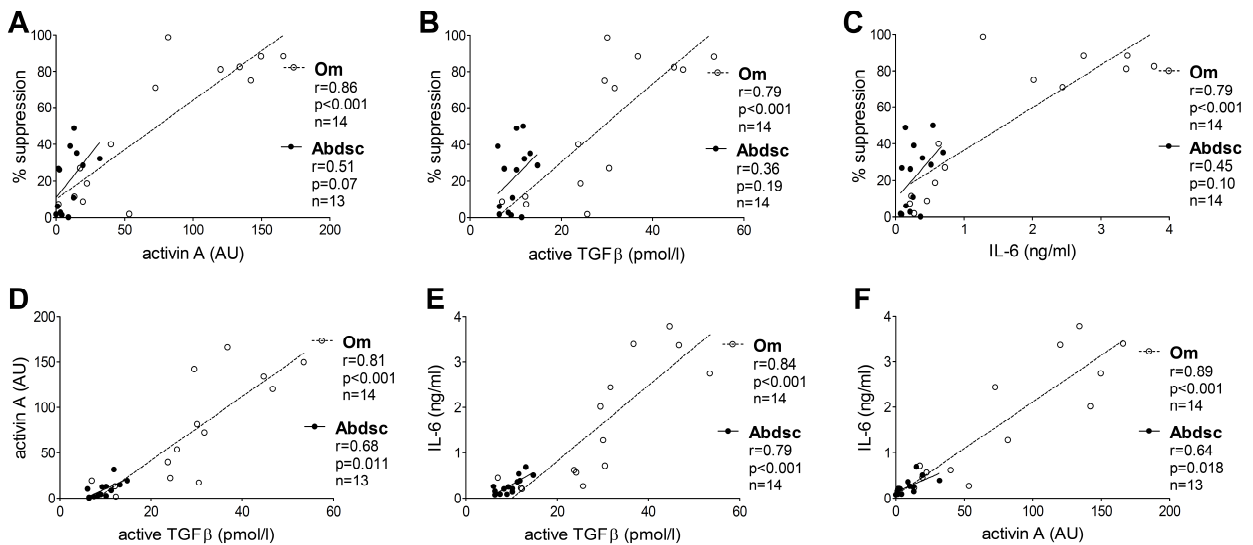


SUPPLEMENTARY DATA

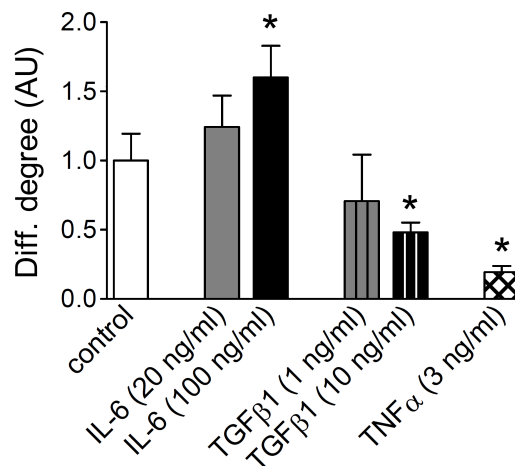
Supplementary Figure S1. Levels of TGFβ ligands and IL-6 in CM correlated with its ability to suppress adipogenesis.

CM samples were obtained from cultures of Om and Abdsc ASCs and levels of activin A, active TGFβ, and IL-6 in the CM samples and their ability to suppress adipogenesis of Abdsc ASCs were assessed (Fig. 2). Correlations between the amount of (A) activin A, (B) active TGFβ and (C) IL-6 within the Om and Abdsc CM samples and their ability to suppress adipogenesis (% suppression) are plotted. Correlations between (D) active TGFβ and activin A, (E) active TGFβ and IL-6 and (F) activin A and IL-6 levels in the CM samples are plotted. Pearson correlation coefficients (r), p values, and number of samples from different subjects are shown in each figure.



Supplementary Figure S2. IL-6 did not suppress adipogenesis in human Abdsc ASCs.

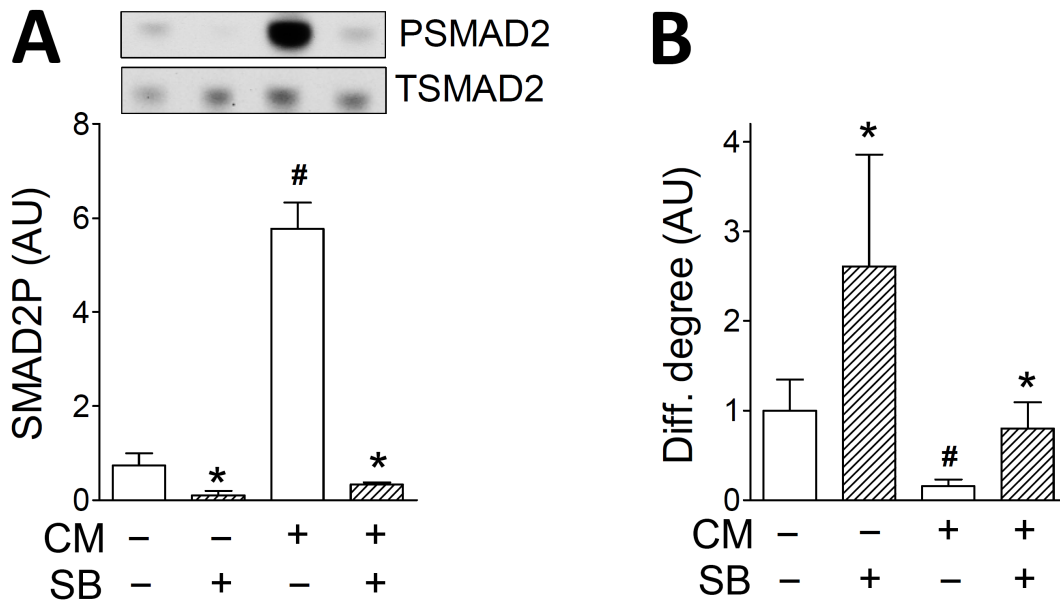
Abdsc ASCs were differentiated in the control condition or with additions of IL-6, TGFβ1, or TNFα during the 7d-induction period and differentiation (Diff.) degree was assessed (TAG content) on d14. * $p<0.05$ compared to the control, Dunnett's test, $n=4$ independent samples.



SUPPLEMENTARY DATA

Supplementary Figure S3. Inhibition of TGFβ signaling completely blocked the anti-adipogenic effects of Om ASC CM.

(A) After a 15 min-preincubation with (+) or without (-) SB431542 (SB, 5 μM), a TGFBR1 kinase inhibitor, Abdsc ASCs were treated with Om ASC CM for additional 30 min and phospho and total SMAD2 levels were measured with immunoblotting. A representative Western image and quantification of phospho to total SMAD2 are presented. (B) Abdsc ASCs were differentiated with combinations of SB (5 μM) and Om ASC CM and Diff. degree (ATGL protein levels) were assessed on d14. *SB and #CM effects were determined by two-way ANOVA followed by paired t-tests, p<0.05, n=7 (A) and 5 (B).



SUPPLEMENTARY DATA

Supplementary Table S1. Characteristics of subjects

#	Age	Sex	BMI	Race	HbA1c	BGR	Medications that Affect Metabolism	Relevant Medical Conditions
1	35	F	25.0	AA	N/A	124		
2	37	M	55.0	AA	7.0	107	Toprol XL	
3	41	F	54.0	H	9.1	103		T2D
4	20	F	54.0	H	6	101		
5	46	F	27.0	H	N/A	84		
6	47	F	51.0	AA	6.1	N/A	Simvastatin	Morbid obesity, Hypercholesterolemia
7	39	F	31.0	H	N/A	N/A		
8	31	F	29.0	H	N/A	87	Levonorgestrel, Estradiol	
9	48	F	23.0	H	N/A		Simvastatin, Provera,	
10	31	M	63.0	H	6.0	139		Hypercholesterolemia
11	50	M	42.0	C	N/A	N/A	Simvastatin	
12	56	F	39.0	C	6.0	130		Lipoprotein disorder, Hypercholesterolemia.
13	48	F	54.0	AA	N/A	89	Atenolol	Fatty liver
14	50	F	39.0	C	6.1	105	Nicotine Patch	
15	45	F	38.0	C	5.8	131		
16	43	F	41.0	H	5.9	107		
17	50	M	43.0	C	N/A	N/A	Simvastatin	Hypercholesterolemia
18	24	F	46.0	AA	5.1	88		
19	20	M	54.0	C	5.5	101		
20	20	F	54.0	H	5.7	101		
21	35	F	40.0	C	6.3	112		
22	36	F	43.0	AA	6	98		
23	58	F	56.0	AA	6.5	N/A		T2D
24	23	F	43.4	C	5.8	84		
25	37	F	38.0	H	5.5	77	Phentermine	OSA
26	21	F	44.1	H	5.2	82		
27	64	M	39.3	C	10.4	206	Atenolol, Avapro, Lantus, Humalog, Lipitor, Niaspan	T2D
28	44	F	37.5	C	5.8	88		
29	35	M	40.4	C	7.2	102	Glipizide	T2D, OSA
30	30	F	44.4	H	5.8	84		
31	33	M	46.3	C	5.6	85		
32	60	M	38.3	C	5.8	91		OSA
33	42	F	41.6	H	6.4	96	Cozaar	
34	29	F	38.3	H	4.9	89	Metoprolol	
35	33	M	50.0	H	6.3	81		OSA
36	20	M	40.2	AA	5.4	102		
37	51	F	39.5	C	5.5	87		
38	26	F	44.9	AA	5.3	89		
39	40	F	46.1	AA	6.4	100		
40	45	F	41.8	AA	5.7	93		
41	59	F	40.3	C	5.6	117		
42	52	F	39.0	C	5.9	89		OSA
43	36	F	38.0	C	5.7	92		OSA
44	43	F	39.1	H	6	101		
45	47	F	39.1	AA	10.1	181	Metformin, Glipizide,	Hyperlipidemia, T2D
46	32	F	27.6	N/A	5.3	95	Metformin	PCOS
47	31	F	43.8	C	6.3	88		
48	27	F	48.8	AA	5.5	95		

SUPPLEMENTARY DATA

49	51	F	26.2	C	5.6	71	
50	41	F	38.9	AA	6.3	123	Hyperglycemia
51	28	F	27.7	AA	5.3	74	Progesterone

AA, African American; C, Caucasian; H, Hispanic; HbA1c, Hemoglobin A1c; RBG, Random Blood Glucose; T2D, Type 2 Diabetes Mellitus; OSA, Obstructive Sleep Apnea; PCOS, Polycystic Ovarian Syndrome; N/A, Not Available