

Table S1: Summary of the time, fold increase/decrease and standard deviation (SD) when the normalized fluorescence intensity between the indicated DM and GM was maximum (n=3).

Reporters	Adipogenesis			Osteogenesis			Chondrogenesis		
	Time (day)	Fold	±SD	Time (day)	Fold	±SD	Time (day)	Fold	±SD
GATA-RE	14	-2.10	0.86	1	1.85	0.92	10	1.88	0.24
GATA2-RE	13	-1.51	0.14	3	1.15	0.15	12	2.32	0.18
GATA3-RE	12	-2.88	0.28	14	1.89	0.59	13	3.07	0.37
P53-RE	6	-7.81	1.34	6	2.62	0.41	2	-1.44	0.37
C/EBP-RE	1	1.72	0.35	10	3.50	0.44	12	1.71	0.21
SMAD2/3-RE	13	-2.16	0.27	1	-1.78	1.71	7	5.89	0.50
KLF4-RE	5	1.68	0.11	14	2.10	0.05	12	2.73	0.70
SMAD1/5/8-RE	14	-1.34	0.18	12	1.97	0.10	6	1.49	0.10
SMAD7-RE	10	-2.35	0.54	13	2.71	0.73	13	4.92	1.00
Adiponectin-P	9	9.62	2.81	1	1.99	2.12	3	-2.11	1.72
SOX9-P	13	-1.46	0.52	11	2.00	0.57	12	2.86	0.38
KLF5-P	9	-1.44	0.12	14	1.72	0.16	7	2.1	0.25
MyoD-RE	11	-1.64	0.39	14	1.85	0.40	7	1.67	0.07
VitD-RE	6	-3.26	5.15	7	11.84	6.46	10	3.14	4.31
OC-BOX-RE	5	6.189	4.37	6	6.61	4.02	6	2.97	4.01
Ose1-RE	11	1.43	0.38	14	3.22	0.33	14	3.04	0.39
Runx2-P	14	-1.60	0.39	14	2.23	0.41	7	1.43	0.14
Collagen1-P	10	-1.49	0.06	13	1.95	0.07	8	1.58	0.23
Collagen2-P	10	-2.72	0.57	3	1.56	0.31	10	3.31	0.37
ERK-RE	13	1.11	1.37	9	2.3	0.25	14	2.06	0.2