

**Table S3** Summary of the time, fold increase/decrease and standard deviation (SD) when the normalized fluorescence intensity between the indicated DM and DM+I was maximum (n=3).

Lineage ►	Adipogenesis			Osteogenesis			Chondrogenesis		
Construct ►	Adiponectin-P			VitD-RE			Collagen2-P		
Inhibitors ▼	Time (day)	Fold	± SD	Time (day)	Fold	± SD	Time (day)	Fold	± SD
PI3Kinase	10	-6.96	0.98	10	-19.57	14.88	7	-3.65	1.67
P38	10	-4.05	1.36	3	4.84	1.26	10	-3.57	1.08
ERK	10	1.69	0.5	6	18.25	18.66	7	1.29	0.11
TGF-β	5	2.07	0.23	8	-2.18	1.03	7	-2.59	0.70
GC	10	-7.93	2.53	8	-4.50	2.69	5	-2.24	1.11
FGF	3	-5.34	2.26	8	-82.28	59.76	7	-5.89	0.14
FAK	10	2.6	2.4	5	-160.95	124.07	8	-1.84	0.17