









### **Supplementary Figure 1**

HOMER output of 318 candidate regulatory elements mapped to the 21 up regulated genes related to extra cellular matrix, using the mouse genome as background.

Rank	Motif	Name	P-value	log P-value	q-value (Benjamini)	# Target Sequences with Motif	% of Targets Sequences with Motif	# Background Sequences with Motif	% of Background Sequences with Motif	Motif File	SVG
1		Fra2(bZIP)/Striatum-Fra2-ChIP-Seq(GSE43429)/Homer	1e-6	-1.421e+01	0.0003	40.0	12.58%	2646.9	5.38%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>
2		BATF(bZIP)/Th17-BATF-ChIP-Seq(GSE39756)/Homer	1e-5	-1.364e+01	0.0003	50.0	15.72%	3779.0	7.68%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>
3		AP-1(bZIP)/ThioMac-PU.1-ChIP-Seq(GSE21512)/Homer	1e-5	-1.305e+01	0.0003	54.0	16.98%	4309.4	8.76%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>
4		NF1-halbsite(CTF)/LNCaP-NF1-ChIP-Seq(Unpublished)/Homer	1e-5	-1.234e+01	0.0005	117.0	36.79%	12483.8	25.37%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>
5		Atoh1(bHLH)/Cerebellum-Atoh1-ChIP-Seq(GSE22111)/Homer	1e-5	-1.220e+01	0.0005	83.0	26.10%	7984.4	16.22%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>
6		NF1(CTF)/LNCAP-NF1-ChIP-Seq(Unpublished)/Homer	1e-5	-1.197e+01	0.0005	36.0	11.32%	2482.7	5.04%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>
7		Fra1(bZIP)/BT549-Fra1-ChIP-Seq(GSE46166)/Homer	1e-5	-1.174e+01	0.0005	41.0	12.89%	3041.2	6.18%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>
8		Atf3(bZIP)/GBM-ATF3-ChIP-Seq(GSE33912)/Homer	1e-4	-1.148e+01	0.0006	47.0	14.78%	3742.3	7.60%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>
9		Fos(bZIP)/TSC-Fos-ChIP-Seq(GSE110950)/Homer	1e-4	-1.126e+01	0.0006	42.0	13.21%	3215.0	6.53%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>
10		JunB(bZIP)/DendriticCells-Junb-ChIP-Seq(GSE36099)/Homer	1e-4	-1.126e+01	0.0006	41.0	12.89%	3104.8	6.31%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>
11		TCF4(bHLH)/SHSY5Y-TCF4-ChIP-Seq(GSE96915)/Homer	1e-4	-1.116e+01	0.0006	106.0	33.33%	11268.3	22.90%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>
12		NeuroD1(bHLH)/Islet-NeuroD1-ChIP-Seq(GSE30298)/Homer	1e-4	-1.076e+01	0.0008	64.0	20.13%	5881.8	11.95%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>
13		BHLHA15(bHLH)/NIH3T3-BHLHB8_HA-ChIP-Seq(GSE119782)/Homer	1e-4	-1.019e+01	0.0013	97.0	30.50%	10293.6	20.92%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>
14		Tcf21(bHLH)/ArterySmoothMuscle-Tcf21-ChIP-Seq(GSE61369)/Homer	1e-4	-9.414e+00	0.0026	70.0	22.01%	6916.2	14.05%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>
15		NeuroG2(bHLH)/Fibroblast-NeuroG2-ChIP-Seq(GSE75910)/Homer	1e-4	-9.246e+00	0.0028	102.0	32.08%	11228.3	22.82%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>
16		Ap4(bHLH)/AML-Tfap4-ChIP-Seq(GSE45738)/Homer	1e-3	-8.186e+00	0.0077	84.0	26.42%	9067.4	18.42%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>
17		Olig2(bHLH)/Neuron-Olig2-ChIP-Seq(GSE30882)/Homer	1e-3	-7.966e+00	0.0090	118.0	37.11%	13868.6	28.18%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>
18		Sox2(HMG)/mES-Sox2-ChIP-Seq(GSE11431)/Homer	1e-3	-7.418e+00	0.0147	55.0	17.30%	5453.7	11.08%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>
19		Lhx3(Homeobox)/Neuron-Lhx3-ChIP-Seq(GSE31456)/Homer	1e-3	-7.322e+00	0.0153	92.0	28.93%	10414.3	21.16%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>
20		Nanog(Homeobox)/mES-Nanog-ChIP-Seq(GSE11724)/Homer	1e-3	-7.259e+00	0.0155	204.0	64.15%	27146.5	55.16%	<a href="#">motif file (matrix)</a>	<a href="#">svg</a>