## Supplementary Table S2

Rank	Motif	P-value	log P-pvalue	% of Targets	% of Background	STD(Bg STD)	Best Match/Details	Motif File
1	<b>ACATGGGAGACT</b>	1e-453	-1.044e+03	14.34%	1.06%	1854.4bp (1561.4bp)	Rbpj1(?)/Panc1-Rbpj1-ChIP-Seq(GSE47459)/Homer(0.594) More Information   Similar Motifs Found	<u>motif file (matrix)</u>
2	<b>CCCCGTCIGGGA</b>	1e-446	-1.028e+03	15.43%	1.34%	1834.3bp (1826.2bp)	Zfp809(Zf)/ES-Zfp809-ChIP-Seq(GSE70799)/Homer(0.695) More Information   <u>Similar Motifs Found</u>	<u>motif file (matrix)</u>
3	T <u>GAGGAGCE</u> CT	1e-434	-1.000e+03	15.77%	1.49%	2028.7bp (1760.9bp)	POL013.1_MED-1/Jaspar(0.598) More Information   <u>Similar Motifs Found</u>	<u>motif file (matrix)</u>
4	<b>TCTGCCCGGCCG</b>	1e-424	-9.770e+02	15.48%	1.47%	2145.5bp (1804.5bp)	THAP1/MA0597.1/Jaspar(0.618) More Information   Similar Motifs Found	<u>motif file (matrix)</u>
5	ICIATICCACAA	1e-423	-9.749e+02	15.60%	1.51%	2631.0bp (1480.5bp)	NFATC2/MA0152.1/Jaspar(0.720) More Information   Similar Motifs Found	<u>motif file (matrix)</u>
6	<b>IGCTCAITGAGE</b>	1e-420	-9.673e+02	12.46%	0.80%	1815.4bp (1483.2bp)	POU6F2/MA0793.1/Jaspar(0.650) More Information   Similar Motifs Found	<u>motif file (matrix)</u>
7	AAGAATISITCT	1e-387	-8.926e+02	13.57%	1.19%	3237.1bp (1360.4bp)	MF0010.1_Homeobox_class/Jaspar(0.658) More Information   Similar Motifs Found	<u>motif file (matrix)</u>
8	<u>TGAAACATGT</u>	1e-381	-8.781e+02	12.68%	1.02%	2131.7bp (1258.3bp)	PH0086.1_Irx5/Jaspar(0.733) More Information   Similar Motifs Found	<u>motif file (matrix)</u>
9	ACTAAGAAAA	1e-379	-8.741e+02	13.69%	1.27%	2588.1bp (1390.6bp)	PB0148.1_Mtf1_2/Jaspar(0.725) More Information   <u>Similar Motifs Found</u>	<u>motif file (matrix)</u>
10	<b>C<u>S</u>T<u>G</u>T<u>G</u>ATCTG</b>	1e-372	-8.582e+02	15.55%	1.83%	3538.5bp (1499.7bp)	SCRT1/MA0743.1/Jaspar(0.680) More Information   Similar Motifs Found	<u>motif file (matrix)</u>
11	ATCCATTAAC	1e-369	-8.498e+02	12.17%	0.96%	1995.6bp (1329.5bp)	Pitx1/MA0682.1/Jaspar(0.788) More Information   <u>Similar Motifs Found</u>	<u>motif file (matrix)</u>
12	TCAGCCCCCCGC	1e-323	-7.446e+02	12.56%	1.31%	1883.8bp (1746.9bp)	GLIS2/MA0736.1/Jaspar(0.669) More Information   <u>Similar Motifs Found</u>	<u>motif file (matrix)</u>
13	ACCGGGGTGGC	1e-321	-7.397e+02	15.86%	2.35%	3420.5bp (1719.0bp)	PB0110.1_Bcl6b_2/Jaspar(0.713) More Information   Similar Motifs Found	<u>motif file (matrix)</u>
14	<b>CCATCGTCTG</b>	1e-316	-7.296e+02	13.04%	1.48%	2725.4bp (1607.0bp)	Smad4(MAD)/ESC-SMAD4-ChIP-Seq(GSE29422)/Homer(0.672) More Information   Similar Motifs Found	<u>motif file (matrix)</u>
15	CGGGAGGTGAGG	1e-315	-7.262e+02	12.92%	1.46%	2563.9bp (1706.4bp)	PB0117.1_Eomes_2/Jaspar(0.638) More Information   Similar Motifs Found	<u>motif file (matrix)</u>
16	<b>TTAAA<del>ç</del>êgat</b>	1e-305	-7.025e+02	11.07%	1.02%	2193.8bp (1268.3bp)	BARHL2/MA0635.1/Jaspar(0.683) More Information   <u>Similar Motifs Found</u>	<u>motif file (matrix)</u>
17	ATCCCATCTA	1e-280	-6.453e+02	13.09%	1.78%	1602.4bp (1573.2bp)	PB0098.1_Zfp410_1/Jaspar(0.719) More Information   Similar Motifs Found	<u>motif file (matrix)</u>
18	<u> AAAGCAGAIGIT</u>	1e-193	-4.461e+02	14.13%	3.21%	2815.4bp (1482.0bp)	BHLHE23/MA0817.1/Jaspar(0.774) More Information   <u>Similar Motifs Found</u>	<u>motif file (matrix)</u>
19	<u>ATTÇÇATTÇGAT</u>	1e-119	-2.755e+02	1.25%	0.00%	13752.1bp (577.1bp)	TEAD3(TEA)/HepG2-TEAD3-ChIP-Seq(Encode)/Homer(0.645) More Information   Similar Motifs Found	<u>motif file (matrix)</u>
20	<u>CCTACTGG</u>	1e-87	-2.025e+02	20.44%	10.01%	4642.6bp (1734.6bp)	ZKSCAN1(Zf)/HepG2-ZKSCAN1-ChIP-Seq(Encode)/Homer(0.734) More Information   Similar Motifs Found	<u>motif file (matrix)</u>
21	<u>AGAGGCGC</u>	1e-70	-1.624e+02	25.12%	14.55%	6496.3bp (1690.8bp)	Zac1(Zf)/Neuro2A-Plagl1-ChIP-Seq(GSE75942)/Homer(0.681) More Information   Similar Motifs Found	<u>motif file (matrix)</u>
22	<u>ĢĢĢĢĢĢŢÇ</u>	1e-40	-9.336e+01	32.59%	23.42%	5216.4bp (1947.8bp)	PB0025.1_Glis2_1/Jaspar(0.947) More Information   Similar Motifs Found	<u>motif file (matrix)</u>
23	CGGCCAGC	1e-26	-6.112e+01	32.04%	24.62%	5426.4bp (1809.7bp)	HIC1(Zf)/Treg-ZBTB29-ChIP-Seq(GSE99889)/Homer(0.669) More Information   Similar Motifs Found	<u>motif file (matrix)</u>
24	TGATGATG	1e-18	-4.226e+01	22.97%	17.55%	6302.5bp (1574.6bp)	JUN/MA0488.1/Jaspar(0.634) More Information   Similar Motifs Found	<u>motif file (matrix)</u>

Supplementary Table S2. The motifs enriched among ATAC-Seq binding sites down-regulated by GSK-J4 in K27M DIPG cells.