

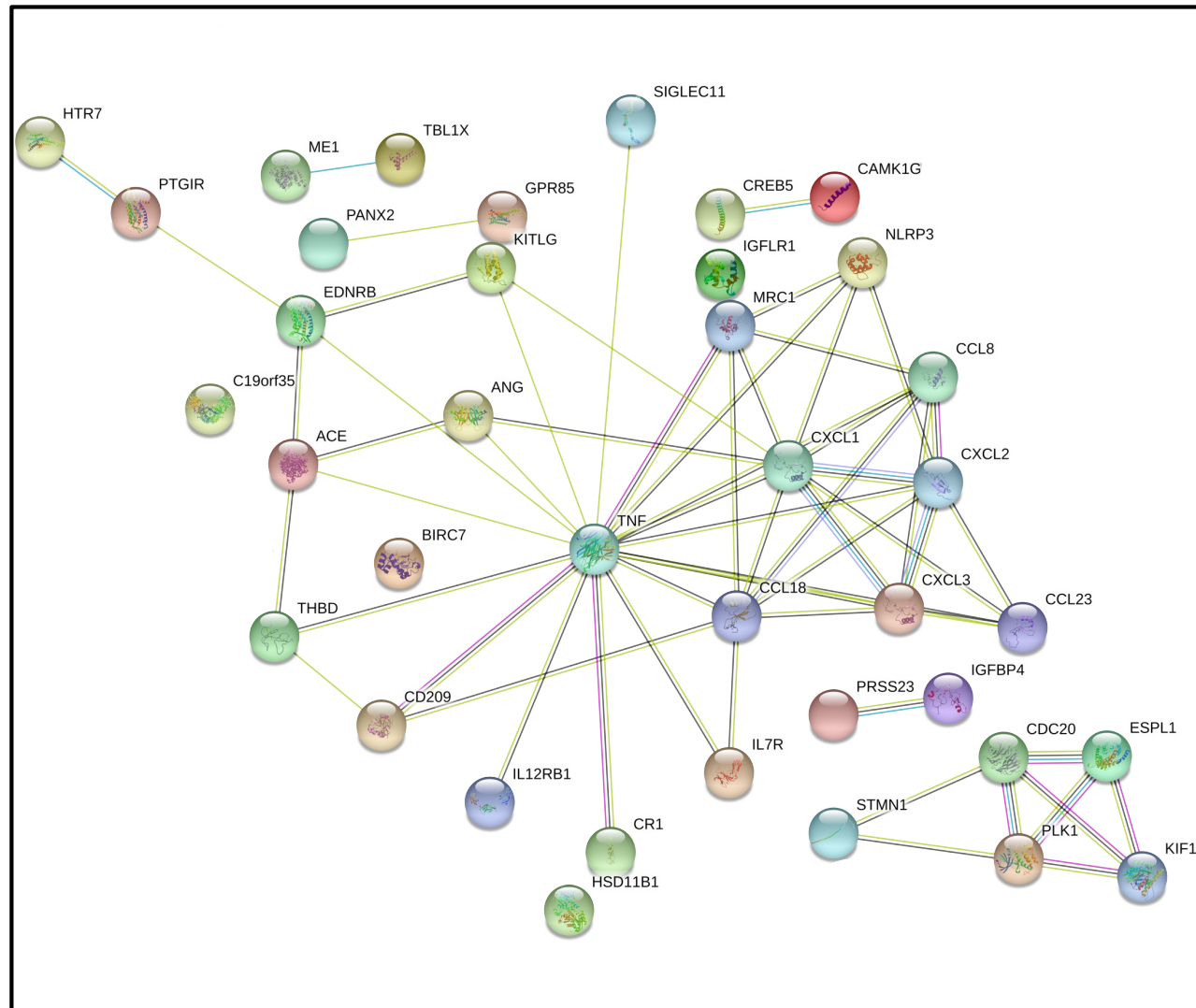
Supplementary Table 1. Top 30 upregulated genes in Z-MDMs.

ID	Log2FC	p-value	Padj	Gene name
ENSG00000134184	4.887165104	6.57E-05	0.011328841	GSTM1
ENSG00000101197	2.934019125	0.000159778	0.018449498	BIRC7
ENSG00000171094	2.639848012	0.000665624	0.031125789	ALK
ENSG00000275385	2.626456217	0.001002067	0.03665687	CCL18
ENSG00000090659	2.623992976	0.000561266	0.029693416	CD209
ENSG00000198848	2.471403387	1.75E-05	0.007831764	CES1
ENSG00000134042	2.265998226	0.000366645	0.025282692	MRO
ENSG00000136160	2.140480486	0.001843627	0.048580191	EDNRB
ENSG00000016391	2.111953296	0.000122619	0.015983846	CHDH
ENSG00000081041	2.109284139	0.000828209	0.033719891	CXCL2
ENSG00000163734	2.073746336	0.001106136	0.038250974	CXCL3
ENSG00000274736	1.964919098	0.001548103	0.044444442	CCL23
ENSG00000092051	1.95188024	0.000305172	0.022832983	JPH4
ENSG00000008118	1.945076481	0.000309969	0.022832983	CAMK1G
ENSG00000111344	1.927156309	0.001050898	0.037312511	RASAL1
ENSG00000148680	1.896904208	0.001125085	0.038601529	HTR7
ENSG00000147570	1.870019959	8.16E-09	3.61E-05	DNAJC5B
ENSG00000160013	1.861028711	0.000663138	0.031125789	PTGIR
ENSG00000105048	1.756993538	0.001920369	0.049678712	TNNT1
ENSG00000163739	1.725065538	0.000883566	0.034740431	CXCL1
ENSG00000221955	1.688727694	0.000223536	0.019707545	SLC12A8
ENSG00000164604	1.648981657	0.000192975	0.019181524	GPR85
ENSG00000254681	1.589781137	0.000339312	0.024355253	PKD1P5
ENSG00000184347	1.581854459	0.000750552	0.032839049	SLIT3
ENSG00000126246	1.580831041	0.000217639	0.019660017	IGFLR1
ENSG00000141753	1.539688666	0.001001341	0.03665687	IGFBP4
ENSG00000096996	1.515076659	0.00020275	0.019382468	IL12RB1
ENSG00000179057	1.489193581	0.000298063	0.022832983	IGSF22
ENSG00000049130	1.453366429	0.00011702	0.015983846	KITLG
ENSG00000168685	1.448829922	0.000159594	0.018449498	IL7R

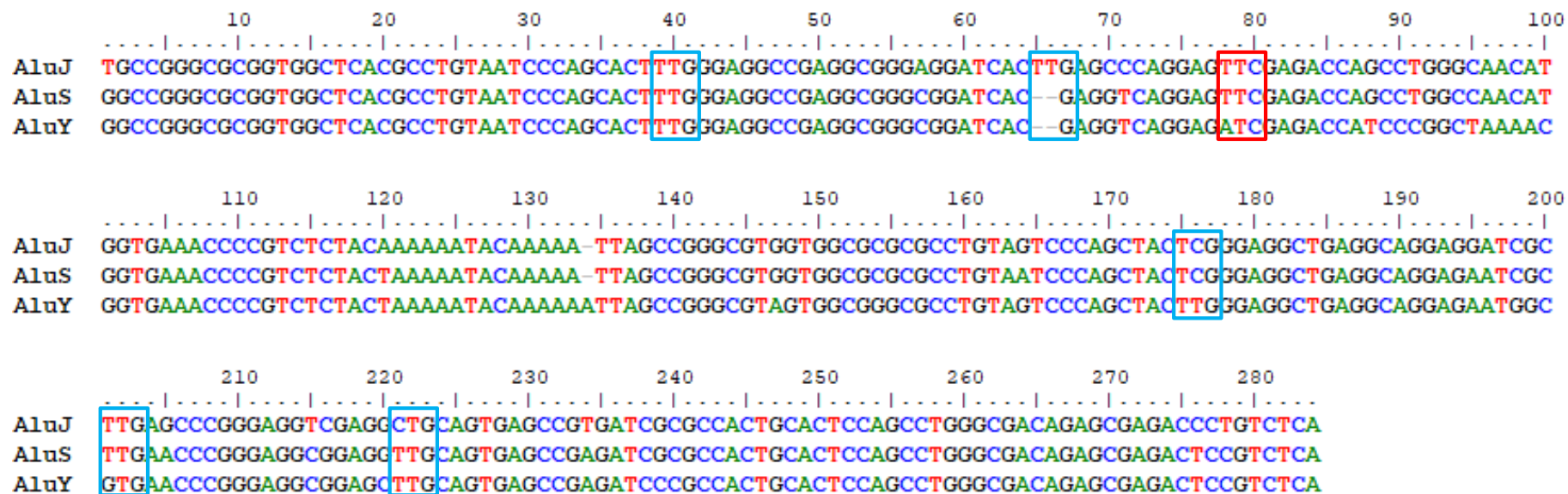
Supplementary Table 2. Top 30 downregulated genes in Z-MDMs.

ID	Log2FC	p-value	Padj	Gene name
ENSG00000258404	-1.002416424	0.001651201	0.046125794	LINC02320
ENSG00000090097	-1.007370376	4.15E-06	0.003446274	PCBP4
ENSG00000135127	-1.010668543	0.00085664	0.034407225	BICDL1
ENSG00000088899	-1.013532109	0.000434387	0.02676314	LZTS3
ENSG00000113657	-1.025648794	0.000581735	0.030101883	DPYSL3
ENSG00000174672	-1.066392664	0.000241703	0.020706903	BRSK2
ENSG00000162896	-1.072442972	0.000635255	0.030786229	PIGR
ENSG00000050327	-1.074952986	8.22E-05	0.012998319	ARHGEF5
ENSG00000175183	-1.082513516	0.000383974	0.025546468	CSRP2
ENSG00000107593	-1.102391052	0.000306275	0.022832983	PKD2L1
ENSG00000124635	-1.103999513	2.12E-06	0.002222802	HIST1H2BJ
ENSG00000153944	-1.108754166	0.000292879	0.022832983	MSI2
ENSG00000133135	-1.131219082	0.00042954	0.02676314	RNF128
ENSG00000230882	-1.136494804	0.000119839	0.015983846	AC005077.4
ENSG00000145911	-1.171488559	0.000815121	0.033719891	N4BP3
ENSG00000105538	-1.189265869	0.000538854	0.028970741	RASIP1
ENSG00000158286	-1.189650887	0.000912684	0.035108682	RNF207
ENSG00000025423	-1.211333695	4.66E-05	0.010455765	HSD17B6
ENSG00000171643	-1.214279665	0.001152254	0.038933285	S100Z
ENSG00000010310	-1.231262242	0.000205297	0.019472438	GIPR
ENSG00000186235	-1.248052742	0.001813373	0.048450249	AC016757.1
ENSG00000147257	-1.263343266	0.00011225	0.015983846	GPC3
ENSG00000232325	-1.268611399	0.001410454	0.042750045	AC093627.1
ENSG00000184702	-1.271328443	0.000198382	0.019228575	SEPTIN5
ENSG00000009950	-1.272398468	0.001893211	0.049182991	MLXIPL
ENSG00000147799	-1.273307216	3.32E-05	0.009754264	ARHGAP39
ENSG00000163975	-1.281755825	1.53E-06	0.002031721	MELTF
ENSG00000182871	-1.314456342	0.000672909	0.031275982	COL18A1
ENSG00000254602	-1.348953498	0.000406529	0.026078724	AP000662.1
ENSG00000179270	-1.354150372	0.001474521	0.043299355	C2orf71

Supplementary Figure 1. Protein-protein interaction network in Z-MDMs.



Supplementary Figure 2. TLR7 binding motif on *Alu* elements.



Supplementary Figure 3. The chromosomal distribution of *Alu* elements.

