Cusanovich, Darren A., et al. "The functional consequences of variation in transcription factor binding." PLoS genetics 10.3 (2014): e1004226.

To evaluate the context of functional TF binding **we knocked down 59 TFs** and chromatin modifiers in **one HapMap lymphoblastoid cell line**. We then **identified genes whose expression was affected by the knockdowns**. We intersected the gene expression data with transcription factor binding data (based on ChIP-seq and DNase-seq) within 10 kb of the transcription start sites of expressed genes. This combination of data allowed us to infer functional TF binding. Cusanovich, Darren A., et al. "The functional consequences of variation in transcription factor binding." PLoS genetics 10.3 (2014): e1004226.

Knockdown effect on global gene expression levels : ...we identified genes that were differentially expressed between the three knockdown replicates of each factor and the six controls. Depending on the factor targeted, the knockdowns resulted in between 39 and 3,892 differentially expressed genes at an FDR of 5% (Figure 1B; see Table S3 for a summary of the results).

ProbeID ENSGID	Symbol A	RNTL2	ENSG0000	000291	.53_DE_p	BATF_	ENSG00	0001561	.27_DE_p	BCL	_3_ENSG0	0000069	399_DE	Е_р С	EBPG_EN	SG000	001538	79_DE_	_p CE	BPZ_E	NSG00
ILMN_1343295	ENSG00000	111640	GAPDH	0.95	2940942	2653558	0.7	2626747	7906638	0.2	20707065	8756502	0.6	6007606	2798455	7 0.	54313	64213	08712	0.1	.80108
ILMN_2110908	ENSG00000	136997	MYC 0.0	054456	9604799	9078 0	.09375	8698752	2 1946 0	.49179	90778280	172 0	.02276	598829	45617	0.2884	436717	14361	0.	11188	94172
ILMN_1651229	ENSG00000	117408	IP013	0.12	6284793	3889237	0.0	9219908	81405161	.2 0.4	10255794	7974246	0.6	6056854	4368745	7 0.	90446	03723	0978	0.0	03221
ILMN_1651232	ENSG00000	164845	FAM86FF	p na	NA NA	NA N/	A NA	NA NA	NA N	A 0.0	05760088	7602000	3 NA	0.004	2085394	952351	14 NA	NA M	NA NA	NA	NA
ILMN_1651237	ENSG00000	167513	CDT1	0.03	2402829	92920664	4 0.0	0638613	2831678	62 0.0	03402783	8340486	9 0.4	1752739	3846569	4 0.	.00772	938150	079355	0.0	45745
ILMN_1651254	ENSG00000	145012	LPP NA	NA	0.44904	4878581	3945	NA NA	NA N	A NA	NA NA	NA N/	A 0.0	090508	0012245	602 N/	A NA	NA M	NA NA	NA	NA
ILMN_1651262	ENSG00000	197451	HNRNPAE	3 0. 75	8793228	8402838	0.1	6711081	7807234	0.1	L7506338	4587082	0.7	165923	0925719	1 0.	. 11503	93600	55559	0.1	45410
ILMN_1651278	ENSG00000	163877	SNIP1	0.98	2327674	4388784	0.0	4835750	2252251	.7 0.6	5 010826 7	1398298	0.3	867516	1861150	3 0.	24457	809978	85764	0.4	42656
ILMN_1651315	ENSG00000	064961	HMG20B	0.92	5504772	223252	0.2	0811541	3376167	0.6	6 757882 3	7201711	0.0	538941	5987313	06 0.	.00410	857917	765785	8 0.8	50989
TI MNI 1651226	ENCCOOOO	100150		NIA	A 17000	0551700	2025	0 0616	E170007	0660	0 0006	001000/	64451	NIA N	A 0 11	A11000	10051	>> (0 1175	10204	54701

~8873 genes represented

MYC binding data avail, but not MYC knockdown data

This table reports the **summary of our differential expression and binding data analysis** for all of the genes expressed:

Column 2: Ensembl gene ID for each gene

Column 3: Gene symbol for each gene

Columns 3–62: Differential expression [[not available for MYC]]: Each of these columns report the P-values from our likelihood-ratio test comparing the knockdown samples to the controls for one of the knockdown experiments

Columns 63–263: **Binding:** Each of these columns reports the **binding data for the 201 factors** [including MYC] for which we had some binding data. For each row, **the counts represent the number of binding events within 10 kb of the transcription start site observed for that factor**. Only 138 of the 201 factors had a usable probe and were detected as expressed on our arrays, and only 131 were differentially expressed in at least one knockdown experiment.