

**Supplementary Table S6 a:** Specifically acetylated genes in B-cell lines which are also down-regulated in B-cell lines upon AZA/TSA treatment (n=67).

A	B	C	D	E	F	G	H
Name	Entrez Gene	RefSeq	Probe set	p-value (Acetylation)	Ratio (Acetylation)	BH (A/T)	Expression (A/T)
RNASEH2B	79621	NM_024570.1	219056_at	0,039407447	1,023293028	6,92E-06	-1,085259442
NSMAF	8439	NM_003580.2	203269_at	0,045679515	1,027346304	1,01E-08	-1,584490348
IGF2BP3	10643	NM_006547.2	203820_s_at	0,029942005	1,209595059	2,95E-06	-2,282319732
EXOSC8	11340	NM_181503.1	215136_s_at	0,02029216	1,223166668	7,22E-08	-2,371766241
ALG5	29880	NM_013338.3	218203_at	0,02947646	1,237911597	8,60E-08	-1,448504234
PPRC1	23082	NM_015062.3	203737_s_at	0,023660977	1,260913205	2,26E-08	-1,739316738
BCL6	604	NM_138931.1	203140_at	0,048407035	1,485799298	0,000380331	-1,392918246
SPCS2	9789	NM_014752.1	201240_s_at	0,020338045	1,54272244	1,35E-07	-1,441408328
CISD1	55847	NM_018464.2	218597_s_at	0,04061485	1,9060713	6,02E-06	-1,452649965
UBTF	7343	NM_001076683.1	214881_s_at	0,042836593	3,637851992	5,18E-08	-1,338674559
UBE2V2	7336	NM_003350.2	209096_at	0,046527854	4,153553555	1,00E-06	-1,610473345
GNB1	2782	NM_002074.2	200744_s_at	0,042466936	4,246135856	3,72E-06	-1,832258
HMGB1	3146	NM_002128.4	200679_x_at	0,039462022	4,420111639	2,20E-07	-2,95188115
SDHB	6390	NM_003000.2	202675_at	0,03964237	4,497001666	5,42E-05	-1,122610457
MPP6	51678	NM_016447.2	205429_s_at	0,04589263	4,720537051	1,81E-05	-1,103663431
EXOSC5	56915	NM_020158.3	218481_at	0,037916969	4,977386716	4,30E-09	-1,273717948
TPD52	7163	NM_001025253.1	201690_s_at	0,045933659	5,093380737	5,08E-06	-1,35342888
AASDHPPT	60496	NM_015423.2	202170_s_at	0,038863367	5,108922601	3,07E-06	-1,329922429
NPM3	10360	NM_006993.1	205129_at	0,01440247	5,121519432	4,39E-06	-1,270578152
SWAP70	23075	NM_015055.2	209307_at	0,044585672	5,204263908	4,21E-07	-2,103545876
BLK	640	NM_001715.2	206255_at	0,04901243	5,344501782	1,51E-06	-2,544873609
E2F5	1875	NM_001083588.1	221586_s_at	0,018960326	5,431671703	2,21E-08	-2,206148368
ARHGDI1	397	NM_001175.4	201288_at	0,03614785	5,61001574	1,44E-07	-2,522946278
CD19	930	NM_001770.4	206398_s_at	0,010658909	5,640830279	3,45E-06	-1,622685436
RABEP2	79874	NM_024816.2	74694_s_at	0,010596179	5,655026189	5,43E-05	-1,033068518
SEC62	7095	NM_003262.3	208943_s_at	0,019301064	5,723598964	1,73E-06	-1,374023948
GARS	2617	NM_002047.2	208693_s_at	0,033626194	5,740623542	2,13E-06	-1,184366765
CUX1	1523	NM_181552.2	214743_at	0,026945937	5,819027248	2,49E-06	-1,861966115

CD27	939	NM_001242.4	206150_at	0,021922508	5,911690757	1,25E-09	-2,681223109
BLNK	29760	NM_013314.2	207655_s_at	0,033895025	5,929994088	1,79E-08	-3,21184195
ST6GAL1	6480	NM_173216.1	201998_at	0,000588366	6,065203933	4,42E-06	-1,620692101
CD38	952	NM_001775.2	205692_s_at	9,76E-06	6,20533255	0,001867928	-1,206032262
SYK	6850	NM_003177.3	207540_s_at	5,36E-05	6,230661405	1,07E-07	-2,093611104
PAX5	5079	NM_016734.1	221969_at	0,029708383	6,363309635	1,81E-07	-2,219609427
RASGRP2	10235	NM_153819.1	214369_s_at	2,55E-05	6,506038373	0,000804319	-1,145581358
RASSF2	9770	NM_170774.1	203185_at	1,15E-05	6,654331544	0,000102544	-1,186206566
LHFP	10186	NM_005780.2	218656_s_at	1,04E-05	6,663456909	0,000584228	-1,128641413
KAT2B	8850	NM_003884.4	203845_at	4,67E-05	6,66407372	2,15E-05	-1,10028423
CD52	1043	NM_001803.2	34210_at	1,18E-05	6,673650028	1,86E-06	-1,630227558
JMJD1C	221037	NM_032776.1	221763_at	1,72E-05	6,734141078	0,000151146	-1,089936229
SPI1	6688	NM_001080547.1	205312_at	6,07E-06	6,779793004	7,36E-08	-1,274026619
VAMP8	8673	NM_003761.2	202546_at	1,49E-05	6,786202187	8,47E-07	-2,544196305
CUL4A	8451	NM_003589.2	201423_s_at	9,33E-06	6,801878474	2,50E-08	-1,65469672
TFEB	7942	NM_007162.1	50221_at	6,77E-06	6,827678434	1,13E-05	-1,121270308
EVI2A	2123	NM_014210.2	204774_at	5,66E-06	6,898317627	1,93E-05	-1,730046964
C3orf37	56941	NM_001006109.1	201678_s_at	2,11E-05	7,001628321	0,000150201	-1,175309272
CCNE2	9134	NM_057749.1	205034_at	4,80E-05	7,042369314	0,004420029	-1,149787205
QTRTD1	79691	NM_024638.2	219178_at	9,22E-06	7,06288472	6,44E-07	-1,174147821
PFTK1	5218	NM_012395.2	204604_at	3,02E-05	7,087651316	3,08E-05	-1,686703523
PLEKHF2	79666	NM_024613.2	218640_s_at	7,61E-05	7,110639072	3,88E-07	-2,328714246
CD79A	973	NM_021601.3	205049_s_at	8,04E-06	7,144976446	1,17E-07	-2,979923214
NCF1	653361	NM_000265.4	214084_x_at	4,62E-06	7,157304968	0,002602245	-1,300127203
CD22	933	NM_001771.2	217422_s_at	5,23E-06	7,169085999	6,48E-08	-2,446908523
POU2AF1	5450	NM_006235.1	205267_at	5,97E-06	7,207354171	3,23E-07	-3,513002109
SASH3	54440	NM_018990.2	204923_at	1,85E-05	7,209975661	3,08E-06	-1,997883401
EVI2B	2124	NM_006495.3	211742_s_at	4,36E-06	7,211612332	0,001225965	-1,233586151
PTPN7	5778	NM_080588.1	204852_s_at	4,37E-06	7,214412634	2,69E-06	-1,286264543
LY86	9450	NM_004271.3	205859_at	6,24E-06	7,514687729	3,71E-05	-1,231825458
CD180	4064	NM_005582.1	206206_at	4,03E-06	7,556756308	4,87E-05	-1,068785049
ELL3	80237	NM_025165.2	219518_s_at	1,18E-05	7,608274764	9,18E-10	-2,588686787
CYFIP2	26999	NM_001037332.2	215785_s_at	6,72E-06	7,639360576	9,25E-08	-1,444878393
BCL7A	605	NM_020993.3	203795_s_at	3,29E-06	7,652945528	6,22E-08	-1,76961298

BACH2	60468	NM_021813.1	221234_s_at	4,45E-06	7,93036795	0,002295126	-1,538088102
PVRIG	79037	NM_024070.3	219812_at	3,47E-06	7,992549392	3,20E-09	-2,524501653
CD79B	974	NM_021602.2	205297_s_at	2,55E-06	8,048696043	2,02E-09	-3,178332697
KIAA0746	23231	NM_015187.3	212311_at	0,000129718	8,24040533	1,92E-08	-2,057253036
C13orf18	80183	NM_025113.2	44790_s_at	7,61E-06	8,262873376	1,17E-05	-1,890512922

**Supplementary Table S6 b:** Specifically acetylated genes in cHL cell lines which are also up-regulated in B-cell lines upon AZA/TSA treatment (n=22).

A	B	C	D	E	F	G	H
Name	Entrez Gene	RefSeq	Probe set	p-value (Acetylation)	Ratio (Acetylation)	BH (A/T)	Expression (A/T)
CCR7	1236	NM_001838.2	206337_at	3,01E-06	-7,716010702	1,80E-06	2,376668247
ATF3	467	NM_001040619.1	202672_s_at	3,97E-06	-7,640583425	2,79E-05	1,811717744
IRF4	3662	NM_002460.1	204562_at	4,87E-06	-7,625499983	0,000182816	1,259158997
BCL2A1	597	NM_004049.2	205681_at	1,78E-05	-7,527741084	0,029613166	1,03343672
FSCN1	6624	NM_003088.2	210933_s_at	4,82E-05	-7,434424042	5,75E-06	2,956946392
VIM	7431	NM_003380.2	201426_s_at	3,18E-05	-7,368164191	0,039046138	1,069574271
RNF11	26994	NM_014372.4	208924_at	0,000162026	-7,028026963	7,61E-06	1,729543919
NCF2	4688	NM_000433.2	209949_at	0,000463405	-6,863260737	0,002576216	1,445551968
UXS1	80146	NM_025076.3	219675_s_at	8,97E-06	-6,488764298	1,03E-05	1,142266761
DUSP5	1847	NM_004419.3	209457_at	4,71E-05	-6,446608669	0,000263105	1,759902885
OPTN	10133	NM_021980.4	202074_s_at	1,00E-05	-6,336785062	1,23E-05	1,214693907
CDR2L	30850	NM_014603.2	213230_at	1,99E-05	-6,239950536	3,48E-05	1,12625272
IL32	9235	NM_001012633.1	203828_s_at	3,54E-05	-6,07638834	8,75E-05	1,036712424
IER3	8870	NM_003897.3	201631_s_at	0,008803634	-5,93008571	3,64E-05	1,890303112
MGST3	4259	NM_004528.2	201403_s_at	0,007008446	-5,687616026	1,23E-07	1,711545913
RYBP	23429	NM_012234.4	201844_s_at	0,033501553	-5,085643545	1,65E-06	1,453270039
CAPRN2	65981	NM_001002259.1	218456_at	0,048340882	-4,990232538	7,76E-07	1,460533664
LGALS1	3956	NM_002305.3	201105_at	7,38E-05	-4,915415555	3,24E-09	4,089636344
JUN	3725	NM_002228.3	201464_x_at	0,025071425	-1,35897883	5,08E-08	2,242620257
AAK1	22848	NM_014911.3	205434_s_at	0,0319807	-1,301586558	1,03E-06	1,168704699
HSPA1A	3303	NM_005345.4	200799_at	0,042325368	-0,996290548	7,37E-06	3,316379277
ID2	3398	NM_002166.4	201565_s_at	0,045506577	-0,980314536	1,81E-06	2,233563413