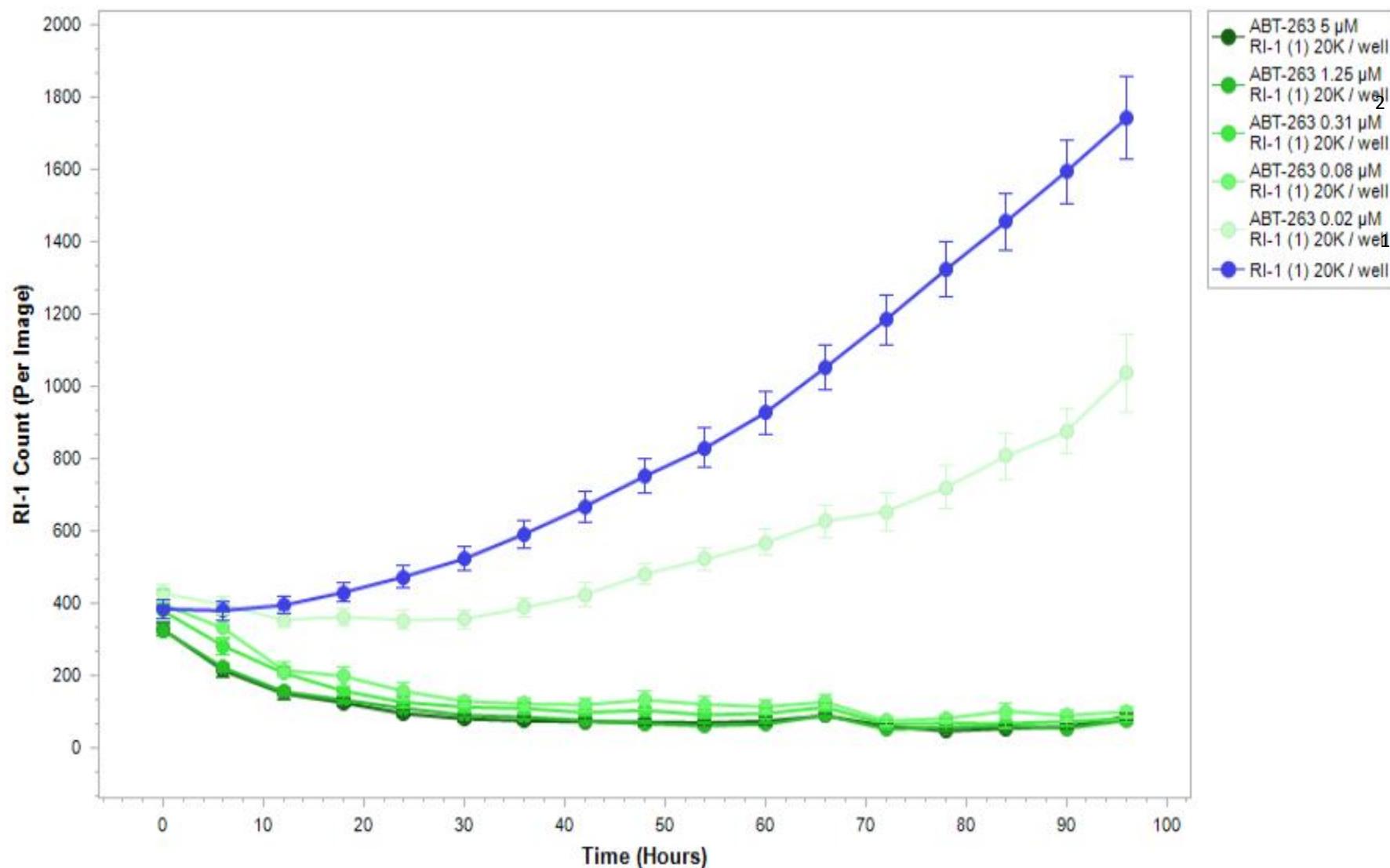
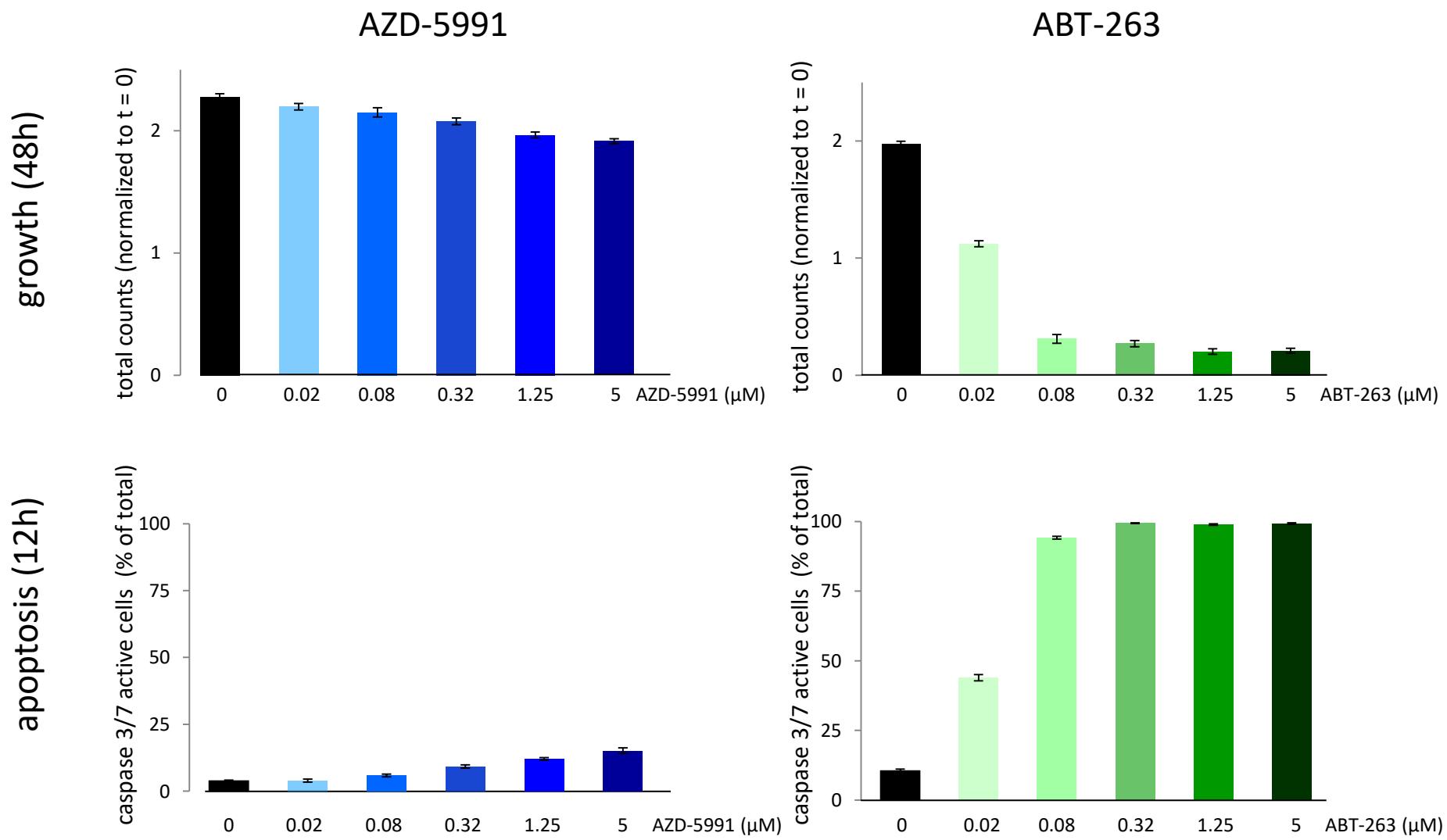


Suppl. Figure 1a

RI-1 DLBCL ($BCL2^{pos}$)

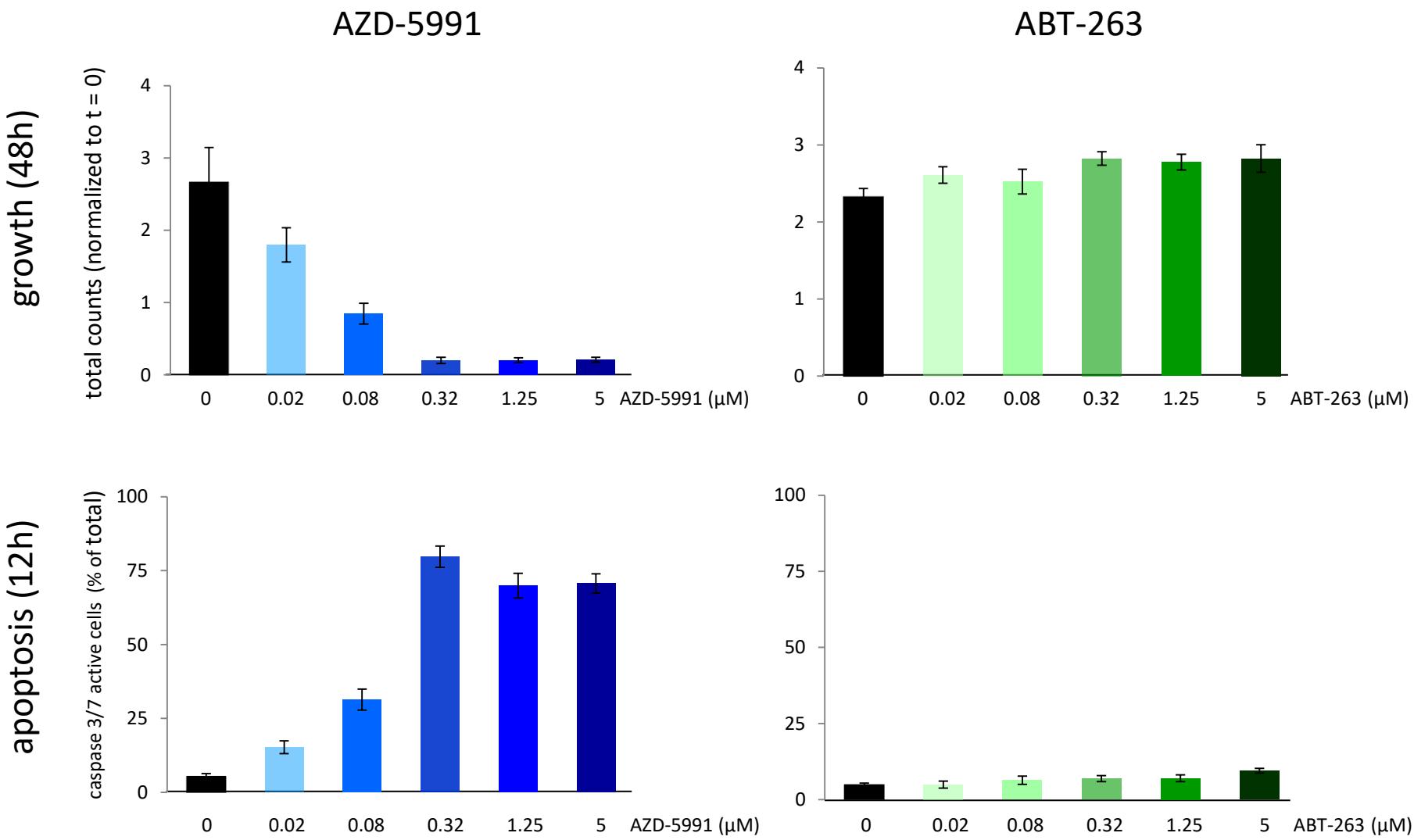
Suppl. Figure 1b

RI-1 DLBCL ($BCL2^{pos}$)

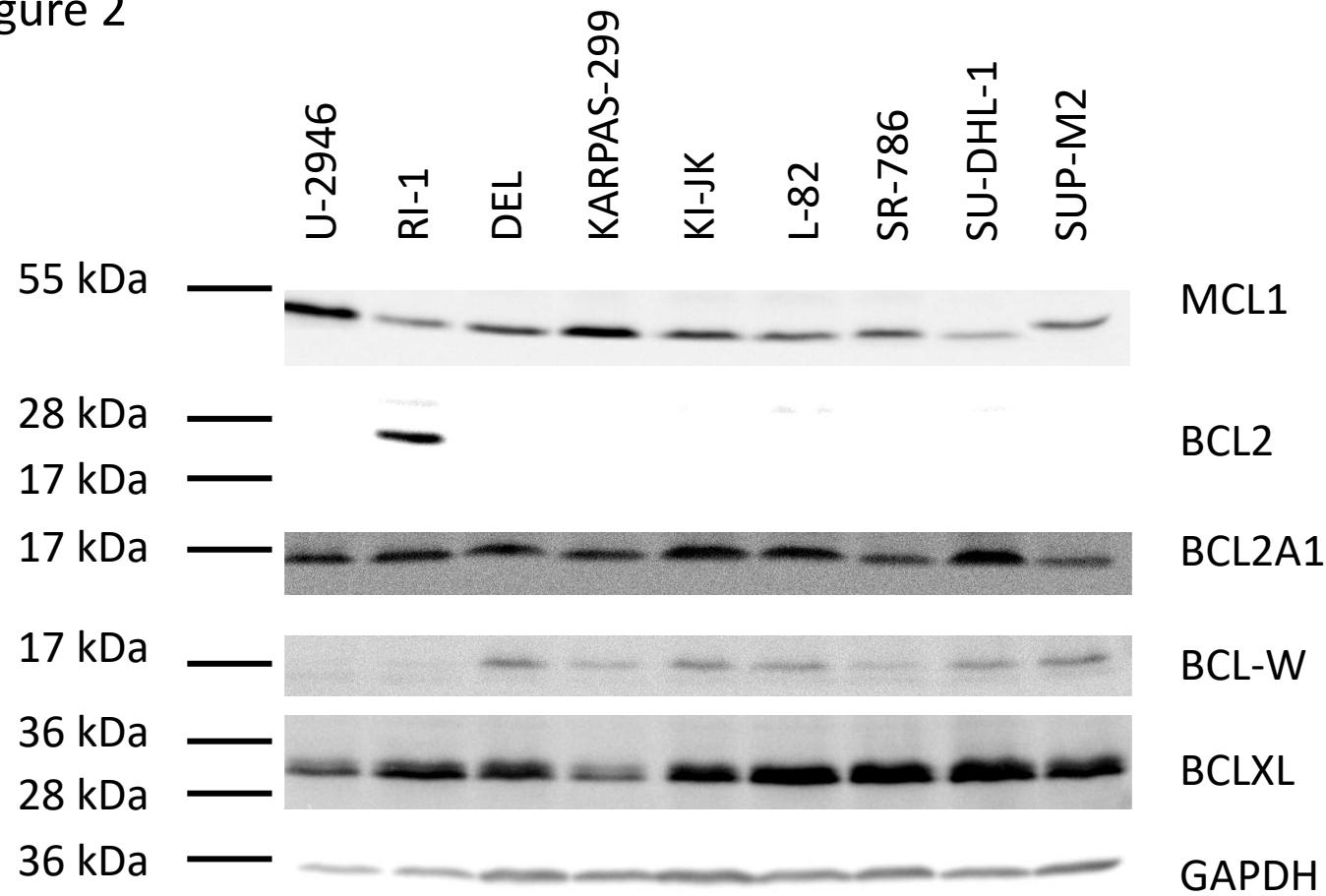


Suppl. Figure 1c

U-2946 DLBCL (MCL1^{pos})

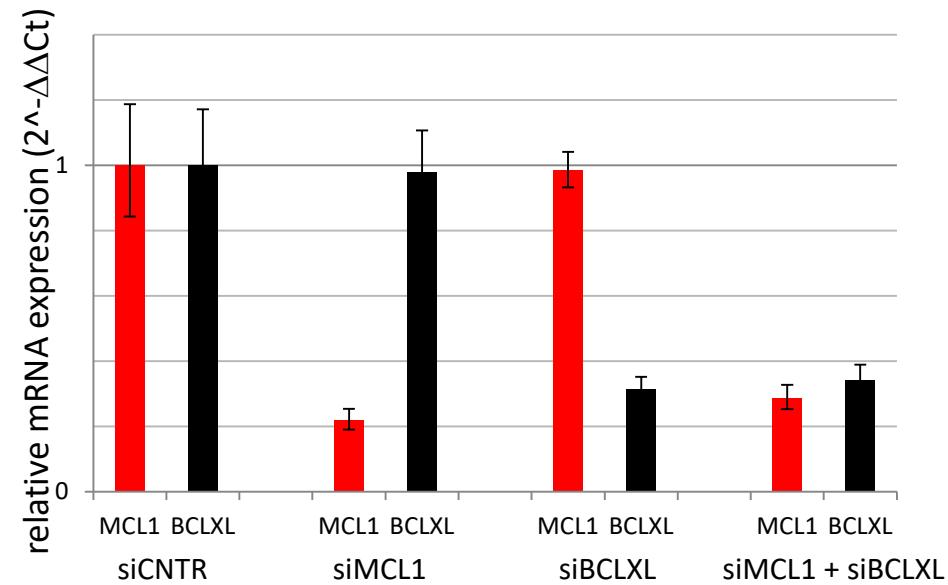


Suppl. Figure 2

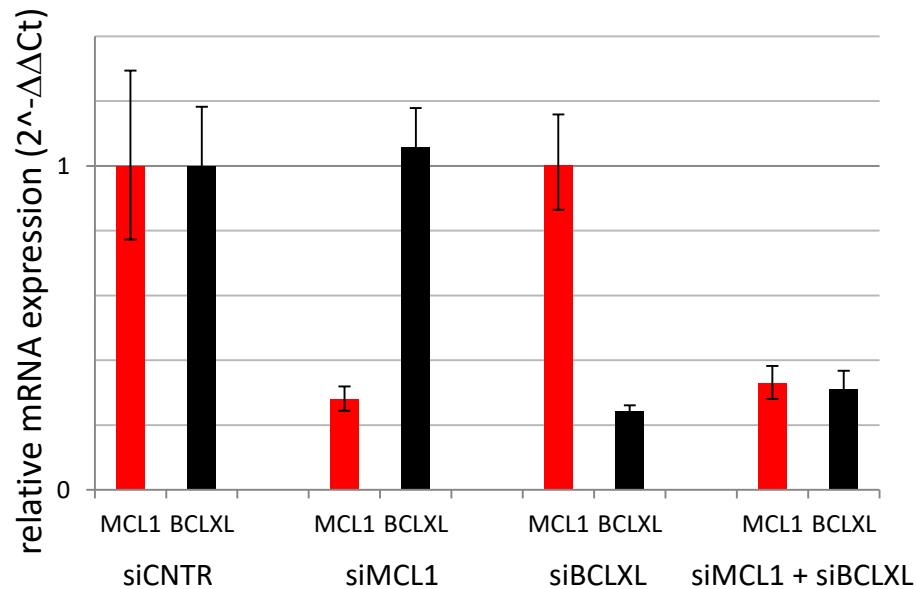


Suppl. Figure 3

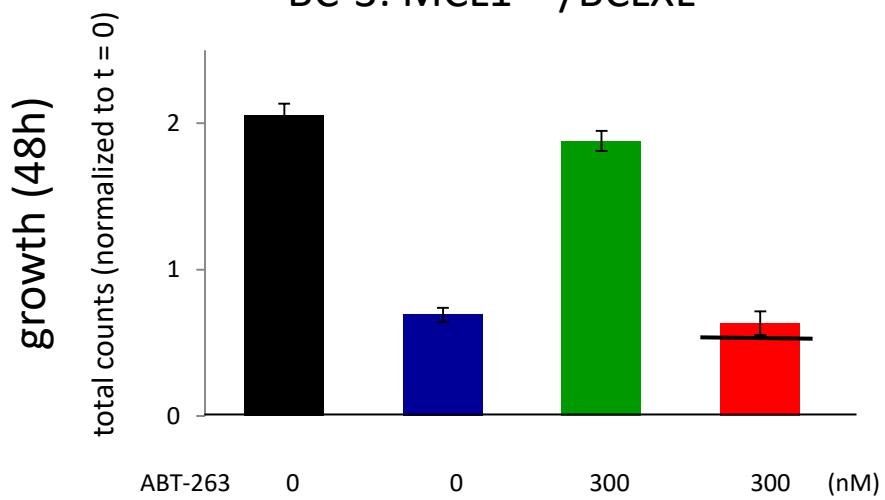
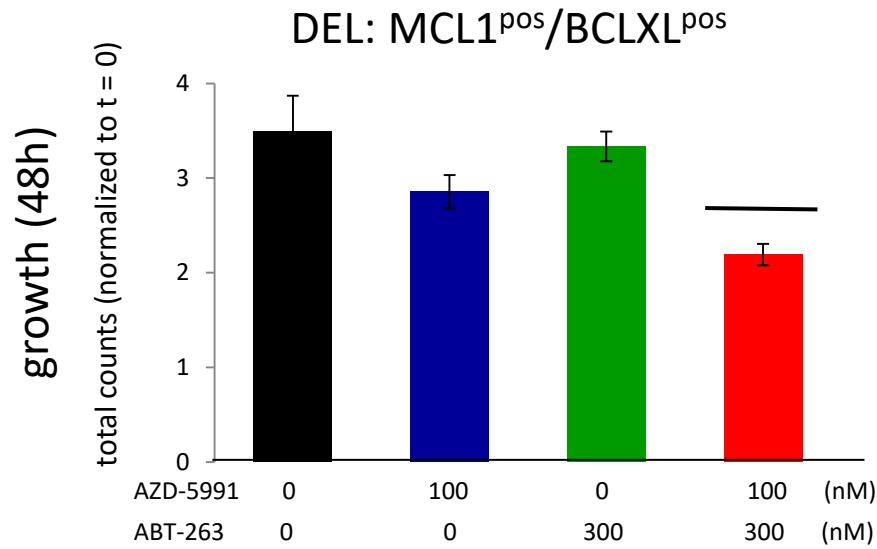
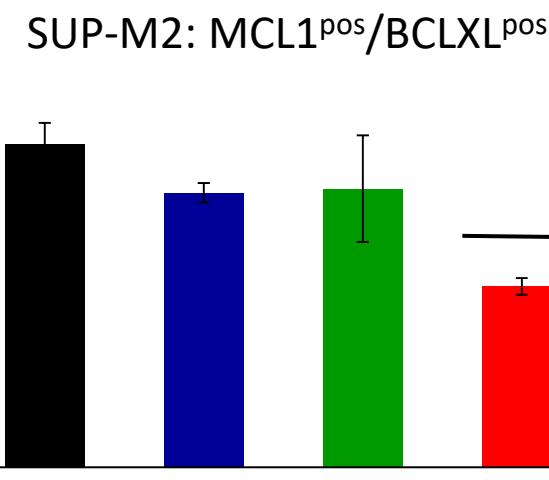
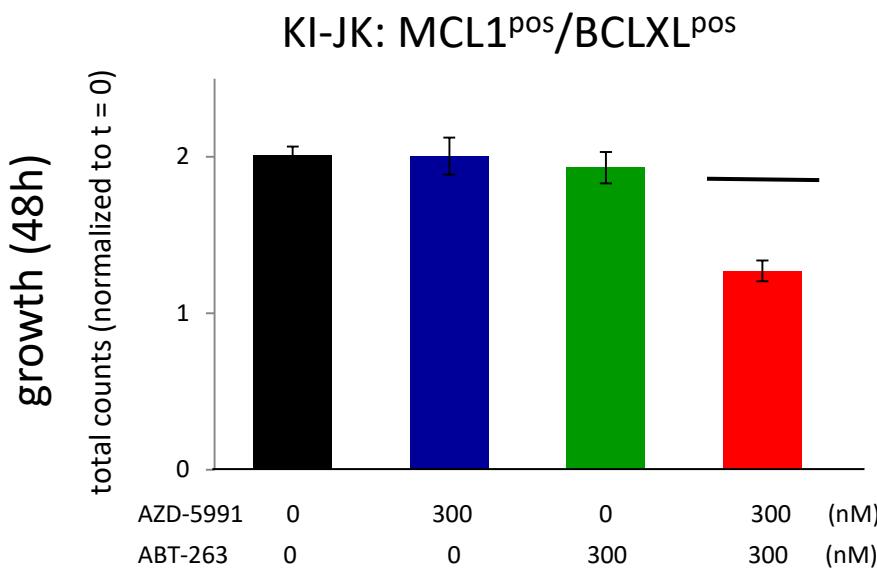
L-82



KARPAS-299

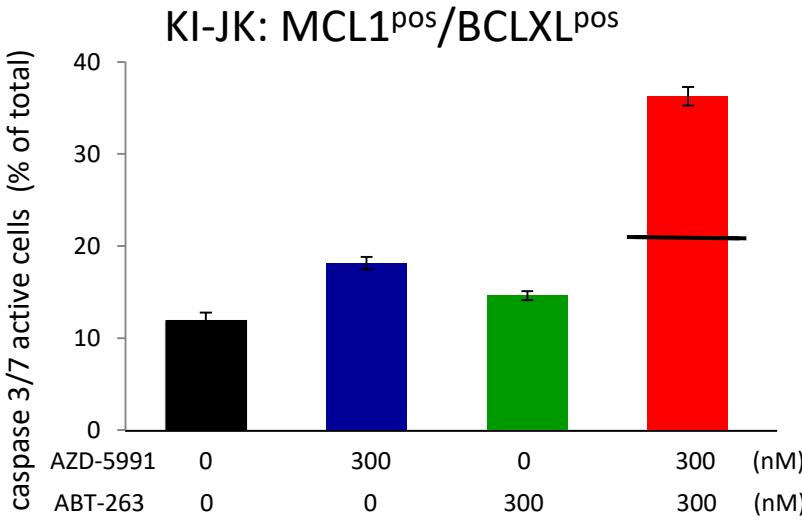


Suppl. Figure 4a

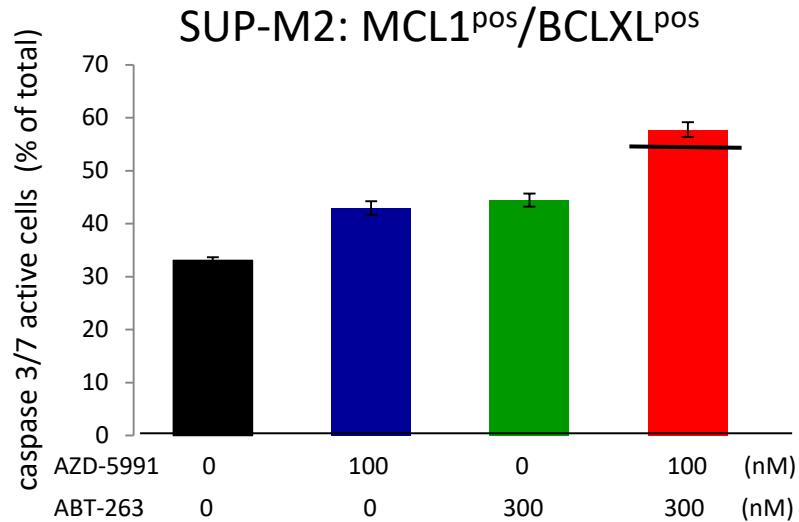


Suppl. Figure 4b

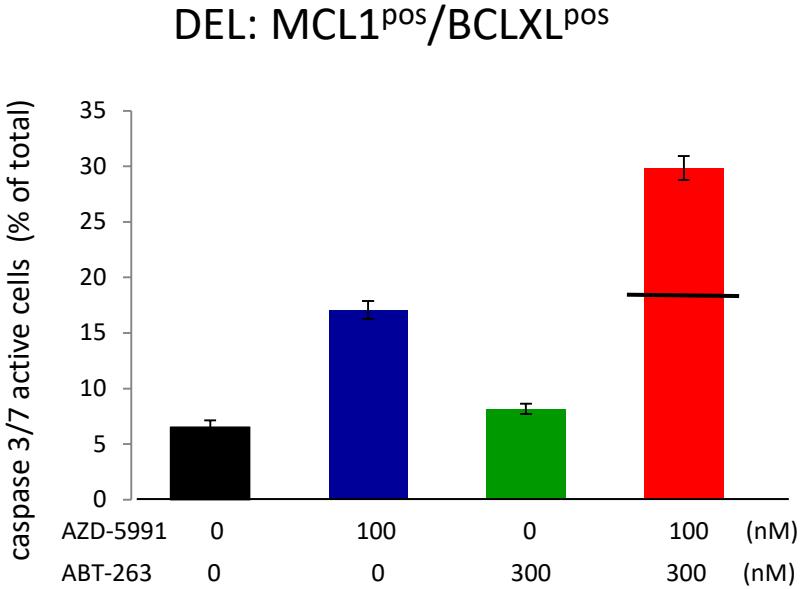
apoptosis (12h)



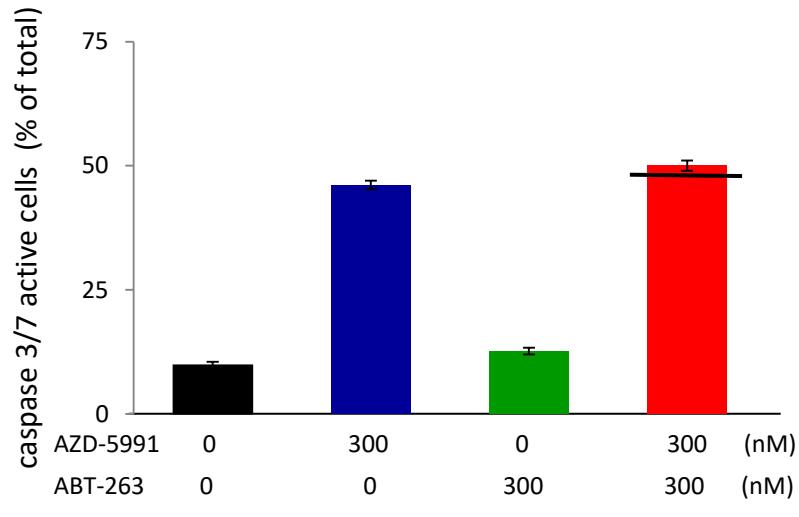
apoptosis (12h)



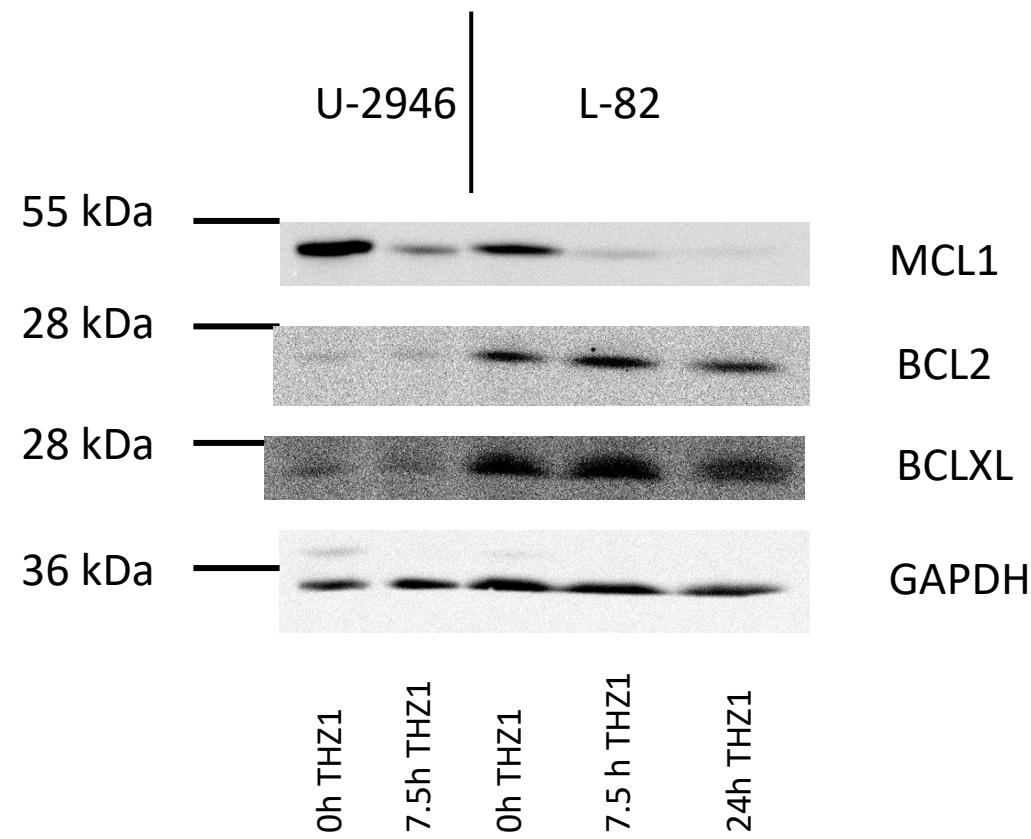
apoptosis (12h)



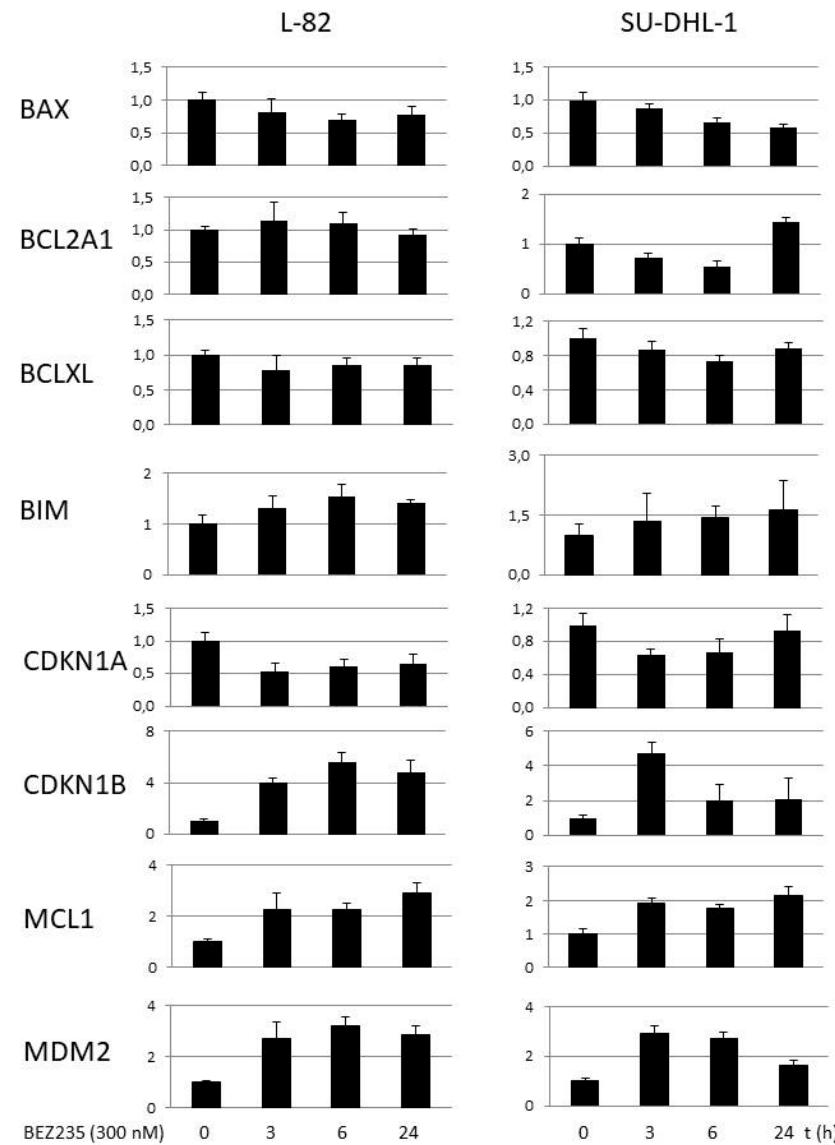
apoptosis (12h)



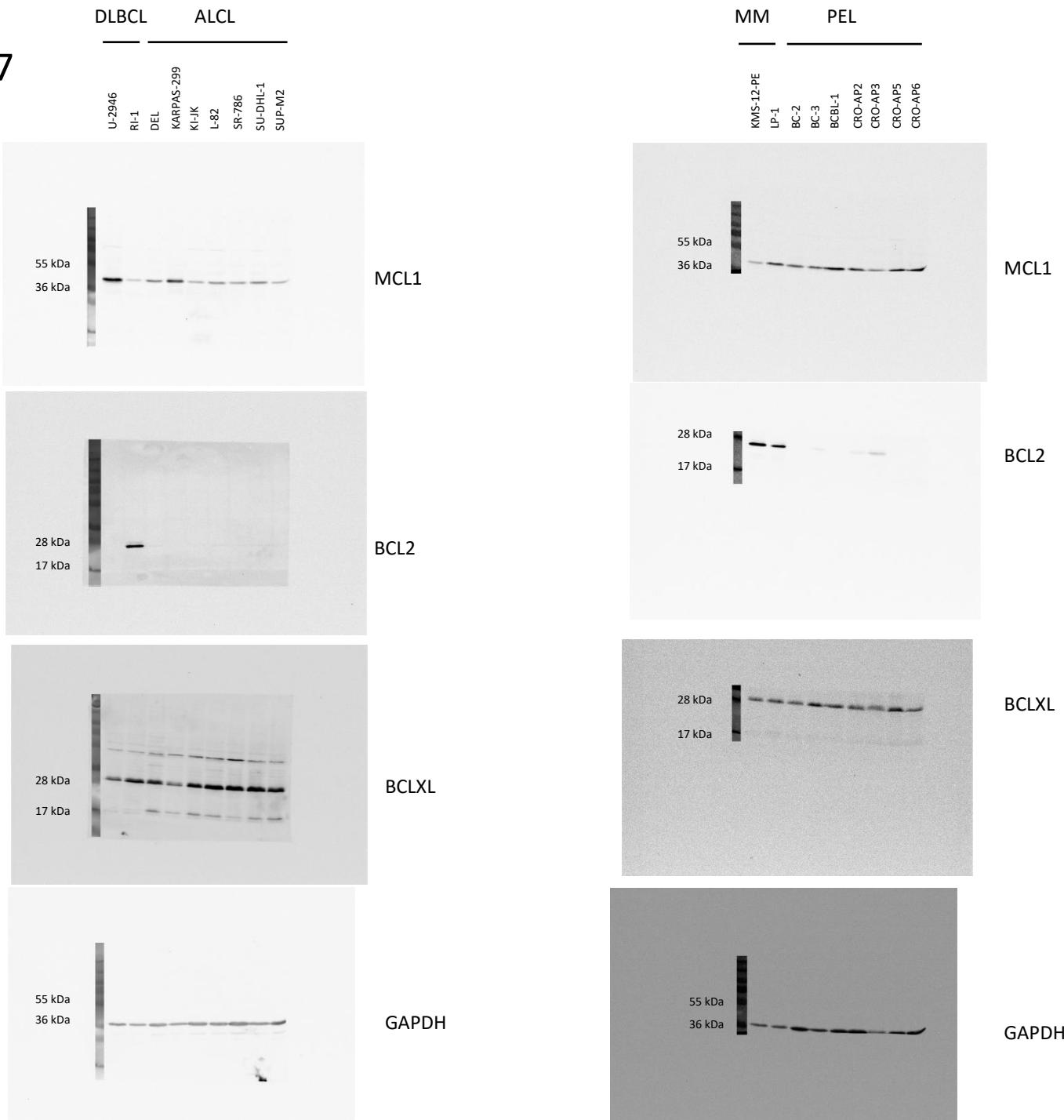
Suppl. Figure 5



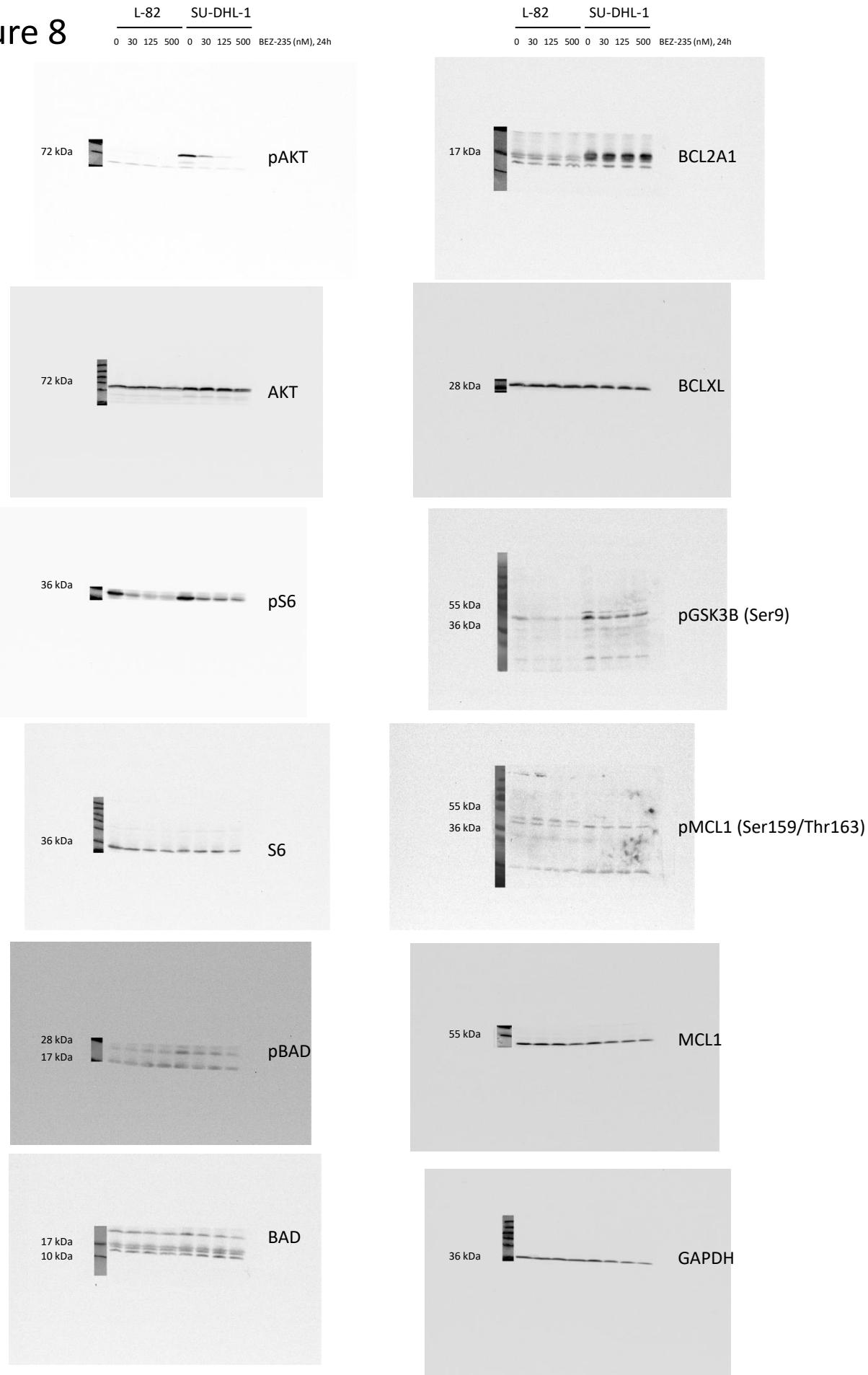
Suppl. Figure 6



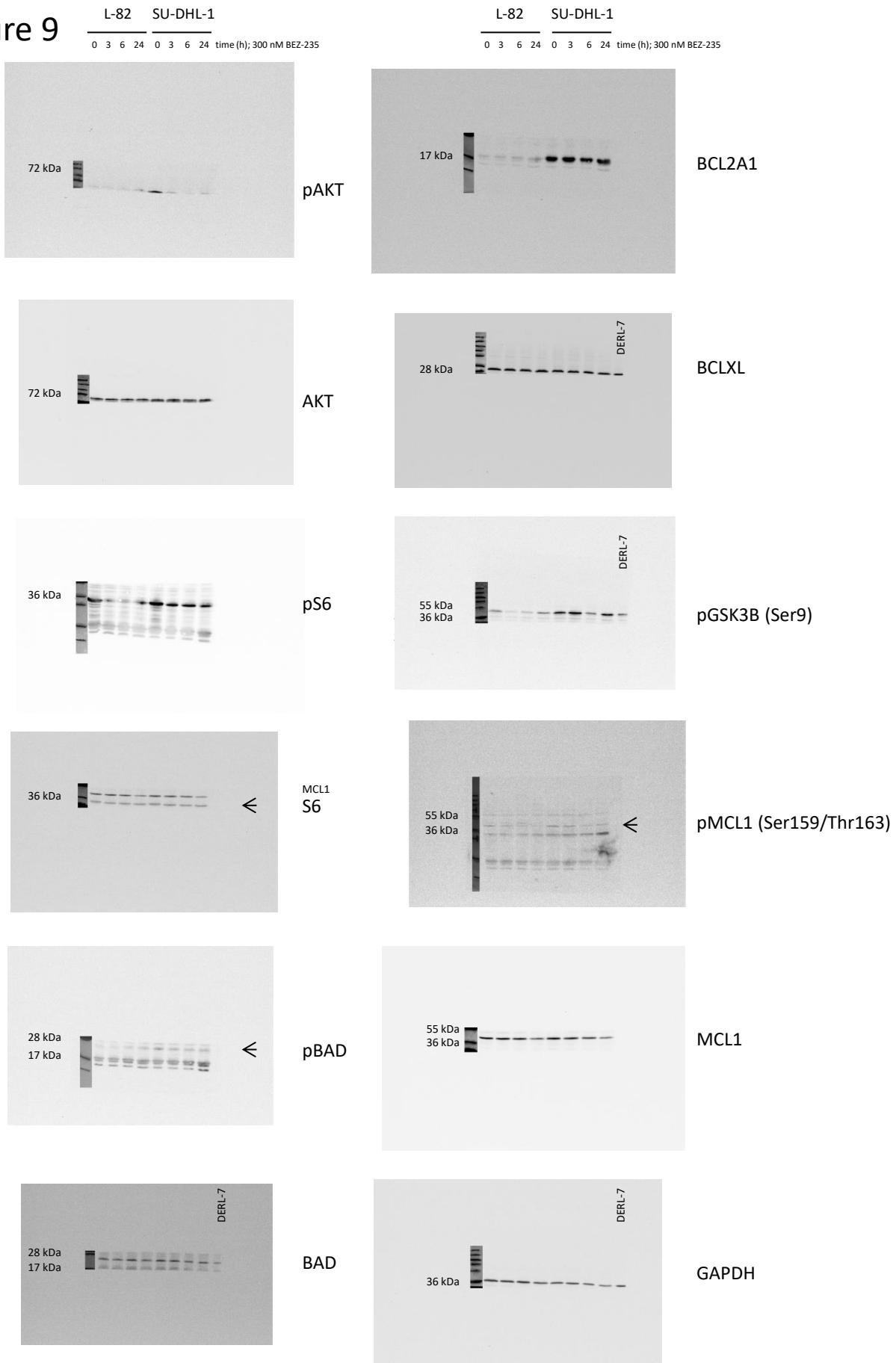
Suppl. Figure 7



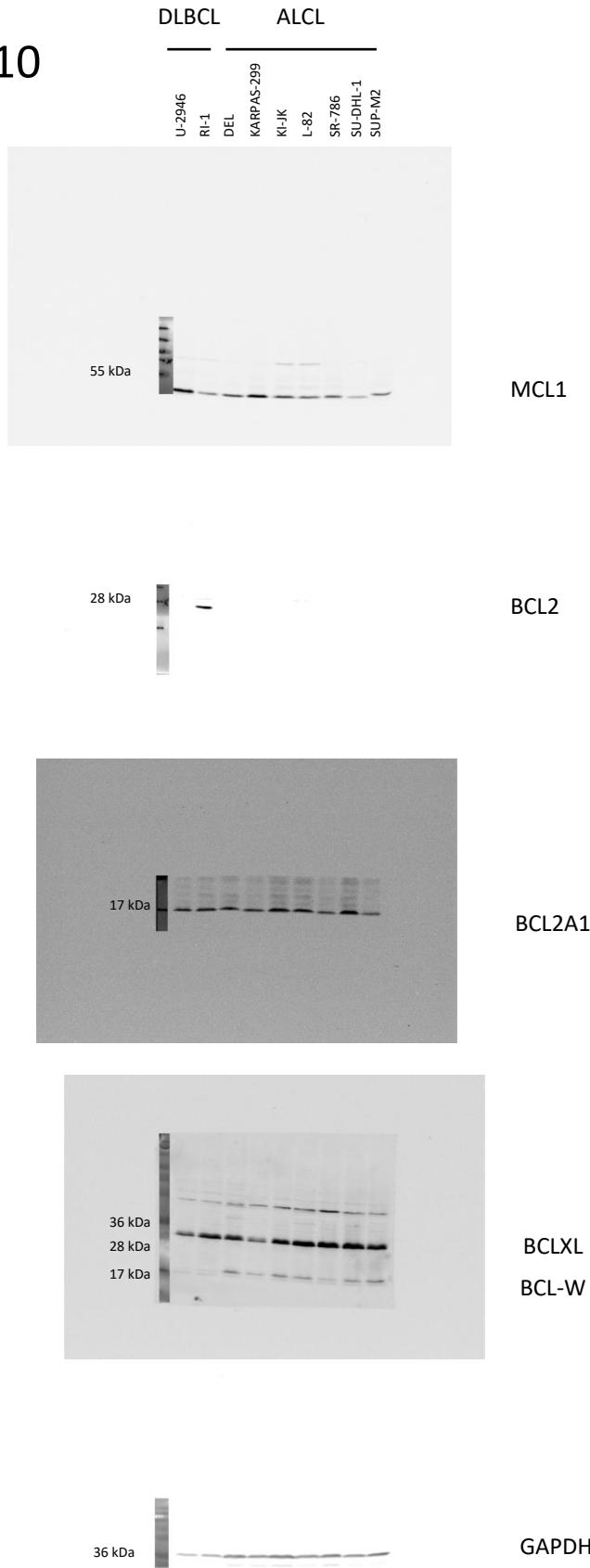
Suppl. Figure 8



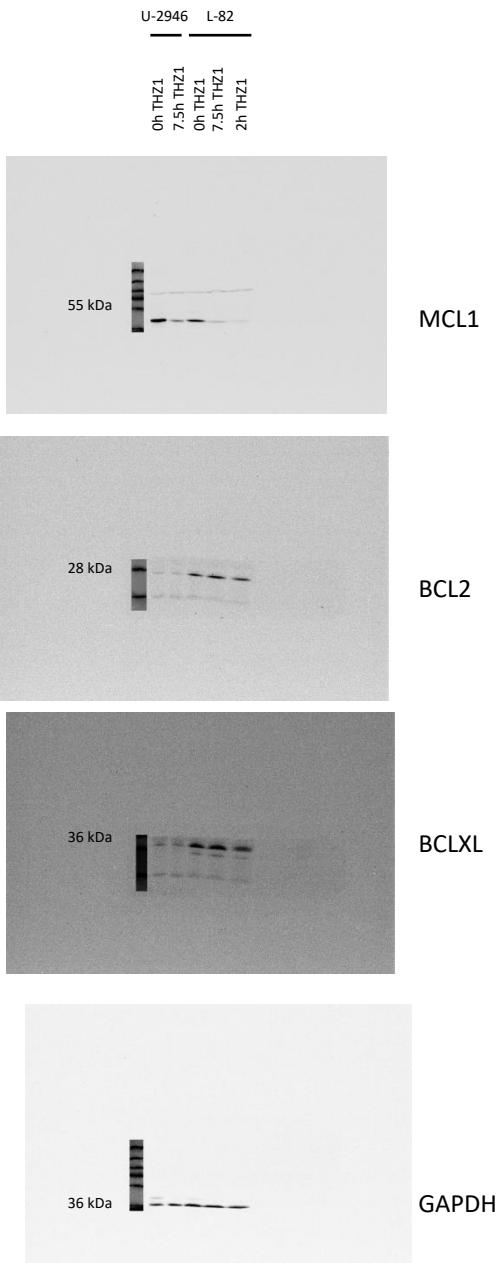
Suppl. Figure 9



Suppl. Figure 10



Suppl. Figure 11



Supplementary Files

Supplementary Figure 1. Effect of AZD-5991 and ABT-263 on growth and apoptosis of DLBCL cell lines. a) Life cell imaging data showing kinetics of the dose-dependent effects of ABT-263 on cell numbers of the BCL2^{pos} DLBCL cell line RI-1. Antiproliferative and proapoptotic effects of the MCL-1 inhibitor AZD-5991 and of the BCL2 inhibitor ABT-263 on the BCL2^{pos} cell line RI-1 (b) and on the MCL1^{pos} cell line U-2946 (c). Apoptosis was assessed by caspase 3/7 activity.

Supplementary Figure 2. Expression of BCL2 family members in ALCL. Western blot analysis showed the expression pattern of BLC2 family members in ALCL cell lines.

Supplementary Figure 3. Efficiency of MCL1 and BCLXL knockdown. qRT-PCR confirmed the efficiency of MCL1 and BCLXL knockdown (24h) with siRNA oligonucleotides.

Supplementary Figure 4. Effect of AZD-5991 and ABT-263 on growth and apoptosis of ALCL cell lines. Life cell imaging data showing the effect of the MCL1 inhibitor AZD-5991 (300 nM) and the BCL2/BCLXL inhibitor ABT-263 (300 nM) on a) growth (48h) and b) apoptosis (12h) of ALCL cell lines. Apoptosis was assessed by caspase 3/7 activity. The horizontal line shows the expected additive effects of the combination of both inhibitors. Note that the only cell line that does not respond to ABT-263 is the BCLX^{low} PEL cell line BC-3.

Supplementary Figure 5. Effect of transcriptional inhibition on MCL1 expression. Western blot analysis showed that stimulation with the transcriptional

inhibitor THZ1 (200 nM) induced a rapid decrease of MCL1 levels in the DLBCL cell line U-2946 and in the ALCL cell line L-82.

Supplementary Figure 6. Effect of BEZ-235 on mRNA expression levels of BCL2 family members and of TP53 targets. qRT-PCR analysis showing time-dependent effects of BEZ-235 (300 nM) on mRNA expression of BCL2 family members and on potential down-stream targets of AKT. Note that the FOXO target BIM is not upregulated after stimulation with BEZ-235. Also TP53 targets CDKN1A and NOXA (NOXA with ct > 40) are not induced by BEZ-235.

Supplementary Figure 7. Original blots cropped and presented in Figure 1C.
Note that in some cases blots were cut to allow the simultaneous use of two antibodies.

Supplementary Figure 8. Original blots cropped and presented in Figure 5A.
Blots were cut to allow the simultaneous use of several antibodies.

Supplementary Figure 9. Original blots cropped and presented in Figure 5B.
Blots were cut to allow the simultaneous use of several antibodies. On several blots, lysate of cell line DERL-7 was included as positive control.

Supplementary Figure 10. Original blots cropped and presented in Supplementary Figure 2. Note that blots were cut to allow the simultaneous use of several antibodies.

Supplementary Figure 11. Original blots cropped and presented in **Supplementary Figure 5**. Note that blots were cut to allow the simultaneous use of several antibodies.

Supplementary Table 1. Amplification status of *MCL1* (red), *BCL2* (black) and *BCLXL* (blue)

| Disease / cell line | karyotype | CGH array | q gen PCR |
|---------------------|----------------------|------------------|------------------|
| ALCL | | | |
| DEL | (2n) | 2n / 1n / 2n | 2n / 1n / 2n |
| KARPAS-299 | (2n) | n.d. / n.d. | 9n / 2n / 2n |
| KI-JK | (3n) +1,+1, +20 | n.d. / n.d. | 6n / 2n / 4n |
| L-82 | (3n), +1 | 2.5n / 1.5n / 4n | 3n / 1.5n / 3.5n |
| SR-786 | (3n), +1,-18 | 2.5n / 1n / 4n | 3n / 1n / 4n |
| SU-DHL-1 | (3n) +1,-18, -20 | 2.5n / 1n / 4n | 3n / 1.5n / 2n |
| SUP-M2 | (2n), +1 | 2.5n / 2n / 2n | 2.5n / 2n / 2n |
| DLBCL | | | |
| RI-1 | (2n) | n.d. / n.d. | 2n / 18n / 2n |
| U-2946 | (2n) | 6n / 2n / 2n | 14n / 2n / 2n |
| MM/PCL | | | |
| ARH-77 | (2n) | n.d. | 3n / 2n / 2n |
| KMS-12-PE | (2n) | n.d. | 3n / 9n / 2n |
| L-363 | (2n) | n.d. | 3n / 2n / 2n |
| LP-1 | (3n) -1, +18, +20 | n.d. | 8n / 3n / 4n |
| MOLP-8 | (2n) | n.d. | 3n / 2n / 2n |
| OPM-2 | (3n) +1, +1, +1, +18 | n.d. | 5n / 2n / 2n |
| U-266 | (2n) | n.d. | 3n / 2n / 2n |
| PEL | | | |
| BC-1 | (2n) | n.d. | 3n / 1n / 2n |
| BC-2 | (4n) -18 | n.d. | 2n / 1n / 2n |
| BC-3 | (2n) | n.d. | 2n / 1.5n / 2n |
| BCBL-1 | (4n) | n.d. | 3n / 1n / 2n |
| CRO-AP2 | (2n) | n.d. | 3n / 1.5n / 2n |
| CRO-AP3 | (4n) -1 | 2.5n / 2n / 2n | 3n / 1.5n / 2n |
| CRO-AP5 | (2n) | n.d. | 3n / 1.5n / 2n |
| CRO-AP6 | (2n) | n.d. | 3n / 1.5n / 2n |

MCL1 (chr1q21.3), *BCL2* (chr18q21.33), *BCLXL* (chr20q11.21); for detailed karyotypes see www.dsmz.de;

q gen PCR: endogenous control: LINE1; diploid reference cell line: NC-NC; n.d. not done.

Supplementary Table 2A: Genes upregulated in SU-DHL-1 after stimulation with BEZ-235 (300 nM)

| transcript_cluster_id | seqname | symbol | description | gb | SUDHL1_c | SUDHL1_BEZ_3h | SUDHL1_BEZ_6h | log2FC_SU_c_vs_3h | log2FC_SU_c_vs_6h |
|-----------------------|---------|-------------|---|--------------------|----------|---------------|---------------|-------------------|-------------------|
| TC1100012131.hg.1 | chr11 | MMP1 | matrix metalloproteinase 1 | NM_001145938 | 6.69 | 11.58 | 11.54 | -4.89 | -4.85 |
| TC0400007771.hg.1 | chr4 | HTN3 | histatin 3 | NM_000200 | 4.28 | 7.55 | 7.31 | -3.27 | -3.03 |
| TC0100007127.hg.1 | chr1 | ACTL8 | actin-like 8 | NM_030812 | 5.23 | 8.68 | 8.21 | -3.45 | -2.98 |
| TC0500009301.hg.1 | chr5 | GABRA6 | gamma-aminobutyric acid (GABA) A receptor, alpha 6 | NM_000811 | 4.09 | 7.24 | 7.03 | -3.14 | -2.93 |
| TC1900008544.hg.1 | chr19 | RCN3 | reticulocalbin 3, EF-hand calcium binding domain | NM_020650 | 6.00 | 9.10 | 8.89 | -3.10 | -2.90 |
| TC0100012149.hg.1 | chr1 | FMN2 | formin 2 | NM_001305424 | 4.68 | 7.41 | 7.56 | -2.73 | -2.89 |
| TC0200008260.hg.1 | chr2 | VAMP8 | vesicle associated membrane protein 8 | NM_003761 | 6.27 | 9.10 | 8.94 | -2.83 | -2.67 |
| TC1200007359.hg.1 | chr12 | CNTN1 | contactin 1 | NM_001256063 | 5.97 | 8.66 | 8.54 | -2.69 | -2.56 |
| TC0100011454.hg.1 | chr1 | HSD11B1 | hydroxysteroid (11-beta) dehydrogenase 1 | NM_001206741 | 7.11 | 9.68 | 9.63 | -2.57 | -2.52 |
| TC1700011032.hg.1 | chr17 | GNGT2 | guanine nucleotide binding protein (G protein), gamma transd | NM_001198754 | 6.36 | 8.67 | 8.48 | -2.30 | -2.12 |
| TC0600012293.hg.1 | chr6 | MB21D1 | Mab-21 domain containing 1 | NM_138441 | 4.83 | 6.90 | 6.85 | -2.07 | -2.02 |
| TC0700012906.hg.1 | chr7 | ARHGEF35 | Rho guanine nucleotide exchange factor 35 | NM_001003702 | 5.03 | 7.75 | 7.00 | -2.72 | -1.96 |
| TC1000007462.hg.1 | chr10 | ZNF22 | zinc finger protein 22 | NM_006963 | 6.31 | 8.57 | 8.25 | -2.26 | -1.94 |
| TC0900010975.hg.1 | chr9 | GABBR2 | gamma-aminobutyric acid (GABA) B receptor, 2 | NM_005458 | 5.31 | 7.18 | 7.18 | -1.87 | -1.87 |
| TC1000012497.hg.1 | chr10 | BORCS7-AS/M | BORCS7-AS/M readthrough (NM candidate) | NR_037644 | 4.16 | 5.65 | 6.02 | -1.49 | -1.85 |
| TC1100012133.hg.1 | chr11 | MMP3 | matrix metallopeptidase 3 | NM_002422 | 6.55 | 8.50 | 8.40 | -1.95 | -1.85 |
| TC0400012820.hg.1 | chr4 | FGF5 | fibroblast growth factor 5 | NM_001291812 | 6.51 | 8.52 | 8.32 | -2.01 | -1.81 |
| TC0200008347.hg.1 | chr2 | TEX37 | testis expressed 37 | NM_152670 | 6.15 | 7.88 | 7.92 | -1.73 | -1.77 |
| TC0X00011001.hg.1 | chrX | MAGEC2 | MAGE family member C2 | NM_016249 | 6.17 | 7.99 | 7.93 | -1.82 | -1.76 |
| TC19000101833.hg.1 | chr19 | PSG5 | pregnancy specific beta-1-glycoprotein 5 | NM_001130014 | 6.43 | 7.90 | 8.18 | -1.47 | -1.75 |
| TC1700008635.hg.1 | chr17 | RG59 | regulator of G-protein signaling 9 | NM_001081955 | 5.15 | 6.88 | 6.89 | -1.74 | -1.75 |
| TC1000012496.hg.1 | chr10 | AS3MT | arsenite methyltransferase | NM_020682 | 4.25 | 5.67 | 6.00 | -1.42 | -1.75 |
| TC1800007508.hg.1 | chr18 | TNFRSF11A | Transcript Identified by AceView, Entrez Gene ID(s) 8792 | TNFRSF11A_dAug10-u | 5.10 | 6.50 | 6.83 | -1.40 | -1.73 |
| TC0100015598.hg.1 | chr1 | TXNP1 | thioredoxin interacting protein | NM_006472 | 6.85 | 9.01 | 8.54 | -2.16 | -1.68 |
| TC18000088952.hg.1 | chr18 | DSEL | dermatan sulfate epimerase-like | NM_032160 | 6.04 | 8.09 | 7.70 | -2.05 | -1.65 |
| TC2000007016.hg.1 | chr20 | GINS1 | GINS complex subunit 1 (Psf1 homolog) | NM_021067 | 7.88 | 9.25 | 9.45 | -1.37 | -1.56 |
| TC1200011752.hg.1 | chr12 | GLT8D2 | glycosyltransferase 8 domain containing 2 | NM_031302 | 6.37 | 7.92 | 7.91 | -1.55 | -1.54 |
| TC0X0009672.hg.1 | chrX | PAGE1 | P antigen family, member 1 (prostate associated) | NM_003785 | 7.29 | 8.91 | 8.81 | -1.62 | -1.52 |
| TC1200011845.hg.1 | chr12 | SEPLG | selectin P ligand | NM_01206609 | 5.44 | 7.31 | 6.93 | -1.87 | -1.48 |
| TC1200012719.hg.1 | chr12 | WDR66 | WD repeat domain 66 | NM_01178003 | 7.61 | 9.25 | 9.08 | -1.65 | -1.48 |
| TC2000006442.hg.1 | chr20 | NRSN2 | neurensin 2 | NM_024958 | 6.81 | 8.32 | 8.28 | -1.51 | -1.47 |
| TC0800006263.hg.1 | chr8 | DEFB103A | defensin, beta 103A | ENST00000314357 | 5.73 | 8.02 | 7.20 | -2.29 | -1.47 |
| TC2200006540.hg.1 | chr22 | USP18 | ubiquitin specific peptidase 18 | NM_017414 | 6.19 | 7.31 | 7.64 | -1.12 | -1.45 |
| TC0X0008767.hg.1 | chrX | MAGEA1 | MAGE family member A1 | NM_004988 | 7.87 | 9.21 | 9.28 | -1.34 | -1.41 |
| TC2200008036.hg.1 | chr22 | USP41 | ubiquitin specific peptidase 41 | OTTHUMT000000758: | 6.67 | 8.35 | 8.05 | -1.68 | -1.38 |
| TC0900011203.hg.1 | chr9 | PTGR1 | prostaglandin reductase 1 | NM_001146108 | 6.39 | 8.15 | 7.75 | -1.75 | -1.36 |
| TC0600007788.hg.1 | chr6 | SCUBE3 | signal peptide: CUB domain, EGF-like 3 | NM_001303136 | 6.23 | 7.34 | 7.59 | -1.11 | -1.36 |
| TC0500013372.hg.1 | chr5 | ECSCR | endothelial cell surface expressed chemotaxis and apoptosis n | NM_001077693 | 8.51 | 10.07 | 9.86 | -1.56 | -1.35 |
| TC0800011148.hg.1 | chr8 | CNE2 | cyclin E2 | NM_057749 | 4.80 | 6.06 | 6.14 | -1.26 | -1.34 |
| TC0900010971.hg.1 | chr9 | TBC1D2 | TBC1 domain family, member 2 | NM_01267571 | 9.52 | 10.85 | 10.85 | -1.34 | -1.33 |
| TC0X00008860.hg.1 | chrX | F8A2 | coagulation factor VIII-associated 2 | NM_001007523 | 7.92 | 9.17 | 9.25 | -1.25 | -1.33 |
| TC0900009711.hg.1 | chr9 | IFNE | interferon, epsilon | NM_176891 | 8.06 | 9.42 | 9.38 | -1.37 | -1.32 |
| TC0500009033.hg.1 | chr5 | SPINK6 | serine peptidase inhibitor, Kazal type 6 | NM_01195290 | 4.40 | 5.63 | 5.71 | -1.23 | -1.31 |
| TC0700008292.hg.1 | chr7 | STEAP1 | six transmembrane epithelial antigen of the prostate 1 | NM_012449 | 9.16 | 10.53 | 10.46 | -1.37 | -1.30 |
| TC0700010719.hg.1 | chr7 | TBX20 | T-box 20 | NM_01077653 | 5.07 | 5.90 | 6.36 | -0.83 | -1.29 |
| TC1200010601.hg.1 | chr12 | KFBP11 | FK506 binding protein 11 | NM_01143781 | 7.53 | 9.01 | 8.81 | -1.48 | -1.29 |
| TC1000010618.hg.1 | chr1 | CRABP2 | cellular retinoic acid binding protein 2 | NM_01199723 | 5.73 | 7.34 | 7.01 | -1.60 | -1.28 |
| TC0X00011244.hg.1 | chrX | F8A3 | coagulation factor VIII-associated 3 | ENST00000622749 | 7.67 | 8.72 | 8.93 | -1.05 | -1.26 |
| TC0800011646.hg.1 | chr8 | HAS2 | hyaluronan synthase 2 | NM_005228 | 6.89 | 8.41 | 8.15 | -1.52 | -1.25 |
| TC0X00010670.hg.1 | chrX | TMEM25A | transmembrane protein 25A | NM_01104544 | 5.65 | 7.13 | 6.90 | -1.48 | -1.25 |
| TC0500012210.hg.1 | chr5 | TMEM173 | transmembrane protein 173 | NM_01301738 | 9.44 | 10.40 | 10.68 | -0.96 | -1.25 |
| TC1200011460.hg.1 | chr12 | KITLG | KIT ligand | NM_008099 | 5.60 | 7.39 | 6.84 | -1.80 | -1.25 |
| TC1500010184.hg.1 | chr15 | BCL2A1 | BCL2-related protein A1 | NM_00114735 | 8.72 | 10.28 | 9.96 | -1.56 | -1.24 |
| TC1000010589.hg.1 | chr10 | VSTM4 | V-set and transmembrane domain containing 4 | NM_001031746 | 8.14 | 9.38 | 9.37 | -1.24 | -1.24 |
| TC06000010825.hg.1 | chr6 | ADTRP | androgen-dependent TFP1-regulating protein | NM_001143948 | 7.11 | 8.30 | 8.33 | -1.19 | -1.22 |
| TC0400010048.hg.1 | chr4 | ZNF518B | zinc finger protein 518B | NM_053042 | 6.20 | 6.70 | 7.42 | -0.50 | -1.22 |
| TC2100006854.hg.1 | chr21 | MAP3K7CL | MAP3K7 C-terminal like | NM_01286617 | 4.39 | 5.81 | 5.60 | -1.42 | -1.21 |
| TC0200010421.hg.1 | chr2 | AOX1 | aldehyde oxidase 1 | NM_001159 | 8.83 | 10.01 | 10.03 | -1.18 | -1.21 |
| TC1900010479.hg.1 | chr19 | DMKN | dermokine | NM_001035516 | 9.39 | 10.52 | 10.60 | -1.12 | -1.20 |
| TC2200008008.hg.1 | chr22 | ARVCF | Zhang2013 ALT_ACCEPTOR, ALT_DONOR, coding, INTERNAL_ir_hsa_circ_0092330 | NM_001032116 | 6.32 | 6.51 | 7.52 | -0.19 | -1.20 |
| TC0100017258.hg.1 | chr1 | BATF3 | basic leucine zipper transcription factor, ATF-like 3 | NM_018664 | 8.05 | 9.44 | 9.24 | -1.39 | -1.19 |
| TC1700012231.hg.1 | chr17 | TMEM98 | transmembrane protein 98 | NM_001033504 | 8.04 | 9.41 | 9.22 | -1.37 | -1.19 |
| TC0200013922.hg.1 | chr2 | IL36B | interleukin 36, beta | NM_014438 | 5.10 | 6.33 | 6.28 | -1.23 | -1.18 |
| TC1500008038.hg.1 | chr15 | ARNT2 | aryl-hydrocarbon receptor nuclear translocator 2 | NM_014862 | 7.56 | 8.48 | 8.73 | -0.92 | -1.17 |
| TC1500010082.hg.1 | chr15 | CSPG4 | chondroitin sulfate proteoglycan 4 | NM_001897 | 7.14 | 8.29 | 8.31 | -1.16 | -1.17 |
| TC0500008233.hg.1 | chr5 | C5orf30 | chromosome 5 open reading frame 30 | NM_032111 | 6.77 | 8.18 | 7.94 | -1.42 | -1.17 |
| TC0400007933.hg.1 | chr4 | ANXA3 | annexin A3 | NM_005139 | 8.28 | 9.45 | 9.45 | -1.17 | -1.17 |
| TC1700011435.hg.1 | chr17 | ICAM2 | intercellular adhesion molecule 2 | NM_008073 | 6.13 | 7.51 | 7.30 | -1.38 | -1.17 |
| TC1300010011.hg.1 | chr13 | LINC00452 | long intergenic non-protein coding RNA 452 | NM_01278674 | 8.57 | 9.27 | 9.73 | -0.70 | -1.16 |
| TC1100007216.hg.1 | chr11 | PRRG4 | proline rich Gl (G-carboxyglutamic acid) 4 (transmembrane) | NM_024081 | 6.44 | 7.77 | 7.60 | -1.33 | -1.16 |
| TC1700011774.hg.1 | chr17 | TRIM47 | tripartite motif containing 47 | NM_033452 | 8.34 | 9.24 | 9.48 | -0.90 | -1.14 |
| TC0700010443.hg.1 | chr7 | STEAP18 | STEAP family member 1B | NM_01164460 | 6.95 | 8.44 | 8.09 | -1.49 | -1.14 |
| TC0100008797.hg.1 | chr1 | AK5 | adenylyl kinase 5 | NM_012093 | 6.84 | 7.99 | 7.97 | -1.16 | -1.13 |
| TC2200007615.hg.1 | chr22 | RIBC2 | RIB43A domain with coiled-coils 2 | NM_015653 | 6.22 | 7.09 | 7.34 | -0.86 | -1.12 |
| TC0500012525.hg.1 | chr5 | RP11-54C4.3 | uncharacterized protein LOC100652758 [Source:RefSeq peptide] | NM_001278082 | 6.13 | 6.91 | 7.25 | -0.78 | -1.12 |
| TC1200007560.hg.1 | chr12 | DNAJC22 | DnaJ (Hsp40) homolog, subfamily C, member 22 | NM_01304944 | 7.31 | 8.60 | 8.42 | -1.28 | -1.11 |
| TC0X00011339.hg.1 | chrX | ARSE | arylsulfatase E (chondrodysplasia punctata 1) | NM_000047 | 6.78 | 7.98 | 7.88 | -1.20 | -1.10 |
| TC0100016218.hg.1 | chr1 | RGSS | regulator of G-protein signaling 5 | NM_001195303 | 5.63 | 6.34 | 6.72 | -0.71 | -1.09 |
| TC0900007115.hg.1 | chr9 | GLPR2 | GLI pathogenesis-related 2 | NM_01287010 | 7.12 | 7.84 | 8.21 | -0.72 | -1.09 |
| TC0100018238.hg.1 | chr1 | DNAJB4 | DnaJ (Hsp40) homolog, subfamily B, member 4 | NM_007034 | 7.62 | 8.95 | 8.70 | -1.34 | -1.09 |
| TC0800008028.hg.1 | chr8 | PKIA | protein kinase (cAMP-dependent, catalytic) inhibitor alpha | NM_006823 | 7.77 | 9.04 | 8.84 | -1.27 | -1.08 |
| TC0500010822.hg.1 | chr5 | ACTBL2 | actin, beta-like 2 | NM_001017992 | 7.07 | 8.25 | 8.14 | -1.18 | -1.08 |
| TC1000012536.hg.1 | chr10 | MPP7 | membrane protein, palmitoylated 7 | NM_173496 | 5.88 | 6.35 | 6.95 | -0.47 | -1.07 |
| TC0X00008718.hg.1 | chrX | MTMR1 | myotubularin related protein 1 | NM_001306144 | 4.84 | 5.94 | 5.91 | -1.10 | -1.07 |
| TC1000012428.hg.1 | chr10 | AKR1C3 | aldo-keto reductase family 1, member C3 | NM_001253908 | 7.74 | 8.83 | 8.81 | -1.09 | -1.06 |
| TC1100009169.hg.1 | chr11 | TAGLN | transgelin | NM_001001522 | 8.59 | 9.73 | 9.65 | -1.14 | -1.06 |
| TC0100014685.hg.1 | chr1 | ADGR4 | adhesion G protein-coupled receptor L4 | NM_022159 | 9.72 | 10.98 | 10.78 | -1.26 | -1.06 |
| TC0600013007.hg.1 | chr6 | FAM184A | family with sequence similarity 184, member A | NM_001100411 | 4.52 | 5.13 | 5.57 | -0.61 | -1.05 |
| TC1800007506.hg.1 | chr18 | TNFRSF11A | tumor necrosis factor receptor superfamily, member 11a, NFK | NM_001270949 | 6.29 | 7.15 | 7.34 | -0.86 | -1.05 |
| TC2100006627.hg.1 | chr21 | MIR99AHG | mir-99a-let-7c cluster host gene | NM_027790 | 7.16 | 8.52 | 8.21 | -1.35 | -1.05 |
| TC1700008920.hg.1 | chr17 | ITGB4 | integrin beta 4 | NM_000213 | 4.72 | 4.99 | 5.77 | -0.27 | -1.04 |
| TC1500006786.hg.1 | chr15 | SCG5 | secretogranin V | NM_001144757 | 8.10 | 9.10 | 9.13 | -1.01 | -1.03 |
| TC2000006559.hg.1 | chr20 | CDC25B | cell division cycle 25B | NM_001287516 | 8.88 | 9.84 | 9.90 | -0.96 | -1.02 |
| TC0300010557.hg.1 | chr3 | NEK10 | NIMA-related kinase 10 | NM_001031741 | 4.95 | 7.11 | 5.97 | | |

Supplementary Table 2B: Genes upregulated in L-82 after stimulation with BEZ-235 (300 nM)

| transcript_cluster_id | seqname | symbol | description | gb | L82_c | L82_BEZ_3h | L82_BEZ_6h | log2FC_L82_c_vs_3h | log2FC_L82_c_vs_6h |
|-----------------------|---------|-----------|--|-----------------|-------|------------|------------|--------------------|--------------------|
| TC1100013135.hg.1 | chr11 | OR51B5 | olfactory receptor, family 51, subfamily B, memb | NM_001005567 | 6.95 | 7.93 | 9.98 | -0.98 | -3.03 |
| TC2000007830.hg.1 | chr20 | TFAP2C | transcription factor AP-2 gamma (activating enha | NM_003222 | 6.71 | 6.77 | 9.30 | -0.05 | -2.58 |
| TC2200007150.hg.1 | chr22 | TIMP3 | TIMP metallopeptidase inhibitor 3 | NM_000362 | 8.02 | 9.14 | 10.60 | -1.12 | -2.57 |
| TC0700006844.hg.1 | chr7 | ITGB8 | integrin beta 8 | NM_002214 | 6.70 | 7.60 | 9.01 | -0.90 | -2.31 |
| TC1100007400.hg.1 | chr11 | TSPAN18 | tetraspanin 18 | NM_130783 | 6.83 | 7.18 | 9.06 | -0.35 | -2.23 |
| TC2100006659.hg.1 | chr21 | CXADR | coxsackie virus and adenovirus receptor | NM_001207063 | 5.07 | 4.91 | 7.24 | 0.16 | -2.17 |
| TC2000009317.hg.1 | chr20 | SULF2 | sulfatase 2 | NM_001161841 | 6.87 | 7.38 | 8.98 | -0.51 | -2.11 |
| TC0X00008674.hg.1 | chrX | AFF2 | AF4/FMR2 family, member 2 | NM_001169122 | 5.47 | 5.28 | 7.52 | 0.19 | -2.06 |
| TC1100009924.hg.1 | chr11 | OR51B4 | olfactory receptor, family 51, subfamily B, memb | NM_03179 | 6.45 | 7.42 | 8.48 | -0.96 | -2.03 |
| TC0300009773.hg.1 | chr3 | FETUB | fetuin B | NM_001308077 | 6.08 | 7.74 | 8.09 | -1.66 | -2.01 |
| TC0600008972.hg.1 | chr6 | PRDM1 | PR domain containing 1, with ZNF domain | NM_001198 | 6.27 | 6.67 | 8.27 | -0.41 | -2.00 |
| TC0100011391.hg.1 | chr1 | IL24 | interleukin 24 | NM_001185156 | 8.71 | 8.29 | 10.69 | 0.42 | -1.98 |
| TC1900009584.hg.1 | chr19 | ZNF560 | zinc finger protein 560 | NM_152476 | 5.25 | 5.44 | 7.22 | -0.19 | -1.96 |
| TC1200010341.hg.1 | chr12 | PKP2 | plakophilin 2 | NM_001005242 | 7.00 | 8.42 | 8.97 | -1.42 | -1.96 |
| TC1900009576.hg.1 | chr19 | ZNF699 | zinc finger protein 699 | NM_198535 | 5.05 | 5.43 | 6.97 | -0.38 | -1.92 |
| TC1800007340.hg.1 | chr18 | DCC | DCC neprin 1 receptor | NM_005215 | 4.58 | 4.61 | 6.44 | -0.04 | -1.87 |
| TC0600006869.hg.1 | chr6 | DSP | desmoplakin | NM_001008844 | 5.42 | 5.97 | 7.28 | -0.55 | -1.87 |
| TC0100015194.hg.1 | chr1 | SORT1 | sortilin 1 | NM_001205228 | 4.87 | 5.18 | 6.73 | -0.31 | -1.86 |
| TC1000008193.hg.1 | chr10 | PPIF | peptidylprolyl isomerase F | NM_005729 | 7.31 | 8.42 | 9.16 | -1.12 | -1.86 |
| TC1600010561.hg.1 | chr16 | CDH11 | cadherin 11, type 2, OB-cadherin (osteoblast) | NM_001308392 | 6.86 | 8.03 | 8.70 | -1.17 | -1.84 |
| TC1000006768.hg.1 | chr10 | CELF2 | Transcript Identified by AceView, Entrez Gene ID CELF2.v1Aug10-unsp | NM_001205228 | 4.63 | 4.44 | 6.44 | 0.19 | -1.81 |
| TC0900011305.hg.1 | chr9 | TNC | tenascin C | NM_002160 | 7.11 | 9.44 | 8.92 | -2.33 | -1.81 |
| TC0300013954.hg.1 | chr3 | ZNF385D | zinc finger protein 385D | NM_024697 | 5.69 | 6.87 | 7.49 | -1.19 | -1.80 |
| TC1700009694.hg.1 | chr17 | MYH10 | myosin, heavy chain 10, non-muscle | NM_001256012 | 8.92 | 9.22 | 10.69 | -0.31 | -1.77 |
| TC0Y00006648.hg.1 | chrY | VCY1B | variable charge, Y-linked 1B | ENST00000250823 | 6.96 | 7.13 | 8.72 | -0.18 | -1.76 |
| TC1400010012.hg.1 | chr14 | LGMN | legumain | NM_00108530 | 7.41 | 9.33 | 9.17 | -1.91 | -1.76 |
| TC0Y00007078.hg.1 | chrY | VCY | variable charge, Y-linked | NM_004679 | 7.19 | 7.43 | 8.94 | -0.25 | -1.75 |
| TC1900009443.hg.1 | chr19 | C3 | complement component 3 | NM_000064 | 5.77 | 6.19 | 7.51 | -0.42 | -1.74 |
| TC0X00010643.hg.1 | chrX | SEPT6 | septin 6 | NM_015129 | 7.83 | 8.61 | 9.56 | -0.78 | -1.73 |
| TC0600008760.hg.1 | chr6 | PM20D2 | peptidase M20 domain containing 2 | NM_001010853 | 8.27 | 8.78 | 9.98 | -0.51 | -1.71 |
| TC0400010141.hg.1 | chr4 | LDB2 | LIM domain binding 2 | NM_00130834 | 5.70 | 5.63 | 7.41 | 0.08 | -1.71 |
| TC0600011945.hg.1 | chr6 | RCAN2 | regulator of calcineurin 2 | NM_00251973 | 5.78 | 6.55 | 7.48 | -0.76 | -1.70 |
| TC0100017018.hg.1 | chr1 | ETNK2 | ethanolamine kinase 2 | NM_001297760 | 7.27 | 7.64 | 8.96 | -0.36 | -1.68 |
| TC1000011485.hg.1 | chr10 | PDLIM1 | PDZ and LIM domain 1 | NM_020992 | 7.54 | 8.60 | 9.19 | -1.06 | -1.65 |
| TC0X00009672.hg.1 | chrX | PAGE1 | P antigen family, member 1 (prostate associated) | NM_003785 | 5.63 | 6.87 | 7.28 | -1.24 | -1.65 |
| TC0400009904.hg.1 | chr4 | PPP2R2C | protein phosphatase 2, regulatory subunit B, gam | NM_001206994 | 5.77 | 6.04 | 7.38 | -0.27 | -1.62 |
| TC1100006988.hg.1 | chr11 | MRGPRX4 | MAS-related GPR, member X4 | NM_054032 | 6.74 | 6.70 | 8.35 | 0.05 | -1.61 |
| TC0Y00007074.hg.1 | chrY | UTY | ubiquitously transcribed tetratricopeptide repeat c | NM_001258249 | 5.30 | 6.25 | 6.90 | -0.95 | -1.60 |
| TC2000007157.hg.1 | chr20 | CBFA2T2 | core-binding factor, runt domain, alpha subunit 2; | NM_001032999 | 6.17 | 6.47 | 7.75 | -0.30 | -1.58 |
| TC0400007500.hg.1 | chr4 | SPATA18 | spermatogenesis associated 18 | NM_001297608 | 5.50 | 5.88 | 7.08 | -0.38 | -1.58 |
| TC0100006650.hg.1 | chr1 | AJAP1 | adherens junctions associated protein 1 | NM_001042478 | 7.95 | 8.50 | 9.50 | -0.55 | -1.56 |
| TC09000010886.hg.1 | chr9 | PTCH1 | patched 1 | NM_000264 | 5.73 | 5.37 | 7.28 | 0.36 | -1.55 |
| TC0X00010459.hg.1 | chrX | MORC4 | MORC family CW-type zinc finger 4 | NM_001085354 | 5.88 | 6.77 | 7.43 | -0.89 | -1.55 |
| TC0700007034.hg.1 | chr7 | CREB5 | cAMP responsive element binding protein 5 | NM_0011666 | 6.92 | 7.93 | 8.46 | -1.02 | -1.54 |
| TC0200008894.hg.1 | chr2 | MERTK | MER proto-oncogene, tyrosine kinase | NM_006343 | 4.26 | 4.95 | 5.80 | -0.68 | -1.54 |
| TC1200012748.hg.1 | chr12 | CD163L1 | CD163 molecule-like 1 | NM_001297650 | 6.56 | 7.33 | 8.08 | -0.77 | -1.53 |
| TC1100010505.hg.1 | chr11 | ABTB2 | ankyrin repeat and BTB (POZ) domain containing | NM_145804 | 6.74 | 7.30 | 8.23 | -0.56 | -1.49 |
| TC0500013039.hg.1 | chr5 | ADAMTS2 | ADAM metallopeptidase with thrombospondin typ | NM_014244 | 8.31 | 8.30 | 9.79 | 0.01 | -1.48 |
| TC050007258.hg.1 | chr5 | GHR | growth hormone receptor | NM_000163 | 4.59 | 5.35 | 6.06 | -0.77 | -1.47 |
| TC0600006967.hg.1 | chr6 | EDN1 | endothelin 1 | NM_001168319 | 7.18 | 6.85 | 8.64 | 0.32 | -1.46 |
| TC0600012061.hg.1 | chr6 | ICK | intestinal cell (MAK-like) kinase | NM_014920 | 8.15 | 8.20 | 9.58 | -0.05 | -1.44 |
| TC0500010540.hg.1 | chr5 | LIFR | leukemia inhibitory factor receptor alpha | NM_01127671 | 4.49 | 5.11 | 5.91 | -0.62 | -1.42 |
| TC1100013045.hg.1 | chr11 | SIPA1 | signal-induced proliferation-associated 1 | NM_006747 | 7.08 | 7.21 | 8.49 | -0.13 | -1.41 |
| TC0300012814.hg.1 | chr3 | GPR87 | G protein-coupled receptor 87 | NM_023915 | 5.11 | 6.36 | 6.51 | -1.25 | -1.41 |
| TC0800011611.hg.1 | chr8 | TNFRSF11B | tumor necrosis factor receptor superfamily, memt | NM_002546 | 5.33 | 5.95 | 6.73 | -0.62 | -1.41 |
| TC0X00010126.hg.1 | chrX | ATRX | alpha thalassemia/mental retardation syndrome X | NM_000489 | 5.28 | 6.23 | 6.68 | -0.95 | -1.40 |
| TC1700008133.hg.1 | chr17 | KPNB1 | karyopherin (importin) beta 1 | NM_001276453 | 10.13 | 11.27 | 11.50 | -1.14 | -1.37 |
| TC1600008301.hg.1 | chr16 | CALB2 | calbindin 2 | NM_001740 | 8.48 | 8.74 | 9.85 | -0.27 | -1.37 |
| TC2200006833.hg.1 | chr22 | BCR | breakpoint cluster region | NM_004327 | 5.36 | 6.05 | 6.73 | -0.69 | -1.37 |
| TC1900008967.hg.1 | chr19 | ZNF470 | zinc finger protein 470 | NM_001001668 | 5.88 | 5.74 | 7.23 | 0.14 | -1.36 |
| TC1400007744.hg.1 | chr14 | NRXN3 | neurexin 3 | NM_001105250 | 5.65 | 6.59 | 7.00 | -0.94 | -1.35 |
| TC1700010230.hg.1 | chr17 | TIAF1 | TGFBI-induced anti-apoptotic factor 1 | NM_004740 | 7.57 | 7.50 | 8.92 | 0.07 | -1.35 |
| TC0X00006567.hg.1 | chrX | VCX3B | variable charge, X-linked 3B | NM_001001888 | 7.03 | 6.84 | 8.37 | 0.18 | -1.34 |
| TC1000012117.hg.1 | chr10 | CHST15 | carbohydrate (N-acetyl)galactosamine 4-sulfate 6- | NM_001270764 | 7.55 | 8.41 | 8.89 | -0.85 | -1.34 |
| TC0100011520.hg.1 | chr1 | PPP2R5A | protein phosphatase 2, regulatory subunit B, alph: | NM_001199756 | 6.36 | 6.89 | 7.67 | -0.53 | -1.31 |
| TC0200009700.hg.1 | chr2 | GALNT13 | polyepoxide N-acetylglactosaminyltransferase 13 | NM_001301627 | 4.96 | 4.83 | 6.26 | 0.13 | -1.30 |
| TC1100013152.hg.1 | chr11 | SAA2 | serum amyloid A2 | NM_001127380 | 5.25 | 5.29 | 6.55 | -0.04 | -1.30 |
| TC1800006937.hg.1 | chr18 | TAF4B | TAF4b RNA polymerase II, TATA box binding pro | NM_001293725 | 6.11 | 6.59 | 7.38 | -0.48 | -1.28 |
| TC1400007495.hg.1 | chr14 | PLEKH1 | pleckstrin homology domain containing, family H | NM_020715 | 7.22 | 7.47 | 8.49 | -0.25 | -1.27 |
| TC0900006559.hg.1 | chr9 | CD274 | CD274 molecule | NM_001267706 | 7.81 | 9.04 | 9.08 | -1.23 | -1.27 |
| TC1900009439.hg.1 | chr19 | CD70 | CD70 molecule | NM_001252 | 7.70 | 9.38 | 9.86 | -1.68 | -1.26 |
| TC1400008767.hg.1 | chr14 | STXBP6 | syntaxin binding protein 6 (amisyn) | NM_001304476 | 8.66 | 9.02 | 9.92 | -0.35 | -1.26 |
| TC0X00009025.hg.1 | chrX | ANOS1 | anomsin 1 | NM_000216 | 9.50 | 10.21 | 10.75 | -0.71 | -1.25 |
| TC0900010390.hg.1 | chr9 | ABHD17B | abhydrolase domain containing 17B | NM_001025780 | 7.25 | 7.73 | 8.48 | -0.48 | -1.23 |
| TC050007050.hg.1 | chr5 | PDZD2 | PDZ domain containing 2 | NM_178140 | 6.10 | 5.93 | 7.33 | 0.17 | -1.23 |
| TC0X00006559.hg.1 | chrX | V CX | variable charge, X-linked | NM_013452 | 7.36 | 7.18 | 8.58 | 0.18 | -1.22 |
| TC0500008175.hg.1 | chr5 | RGMB | repulsive guidance molecule family member b | NM_001012761 | 6.96 | 8.27 | 8.18 | -1.31 | -1.22 |
| TC1100012722.hg.1 | chr11 | CDON | cell adhesion associated, oncogene regulated | NM_001243597 | 5.25 | 5.27 | 6.47 | -0.02 | -1.22 |
| TC0100009241.hg.1 | chr1 | S1PR1 | sphingosine-1-phosphate receptor 1 | NM_001400 | 8.31 | 7.83 | 9.53 | 0.48 | -1.22 |
| TC0X00007493.hg.1 | chrX | AR | androgen receptor | NM_000044 | 6.57 | 7.37 | 7.79 | -0.80 | -1.22 |
| TC0X00009022.hg.1 | chrX | VCX2 | variable charge, X-linked 2 | NM_016378 | 7.23 | 7.03 | 8.44 | 0.20 | -1.21 |
| TC0300009353.hg.1 | chr3 | PPML1 | protein phosphatase, Mg ²⁺ /Mn ²⁺ -dependent, 1L | NM_139245 | 5.17 | 5.53 | 6.38 | -0.36 | -1.21 |
| TC0300008324.hg.1 | chr3 | PHLDB2 | pleckstrin homology-like domain, family B, memb | NM_001134437 | 8.52 | 9.29 | 9.72 | -0.77 | -1.20 |
| TC1700010358.hg.1 | chr17 | MYO1D | myosin ID | NM_001303279 | 6.27 | 7.20 | 7.47 | -0.93 | -1.20 |
| TC1100010207.hg.1 | chr11 | SOX6 | SRY box 6 | NM_001145811 | 4.59 | 4.51 | 5.79 | 0.08 | -1.20 |
| TC0900007680.hg.1 | chr9 | TLE4 | transducin-like enhancer of split 4 | NM_001282748 | 6.07 | 6.71 | 7.25 | -0.64 | -1.18 |
| TC0X00008040.hg.1 | chrX | MUM1L1 | melanoma associated antigen (mutated) 1-like 1 | NM_001171020 | 5.73 | 5.94 | 6.91 | -0.21 | -1.18 |
| TC2000007973.hg.1 | chr20 | CDH4 | cadherin 4, type 1, R-cadherin (retinal) | NM_01252339 | 6.01 | 6.08 | 7.18 | -0.07 | -1.18 |
| TC1900008141.hg.1 | chr19 | CYP2S1 | cytochrome P450, family 2, subfamily S, polypept | NM_030622 | 8.17 | 8.39 | 9.34 | -0.22 | -1.17 |
| TC0800009905.hg.1 | chr8 | NEFL | neurofilament, light polypeptide | NM_006158 | 6.99 | 7.47 | 8.16 | -0.48 | -1.17 |
| TC1100011234.hg.1 | chr11 | LTBP3 | latent transforming growth factor beta binding pro | NM_001130144 | 9.68 | 10.74 | 10.85 | -1.05 | -1.17 |
| TC1900009867.hg.1 | chr19 | AKAP8L | A kinase (PRKA) anchor protein 8-like | NM_001291478 | 9.06 | 9.55 | 10.23 | -0.49 | -1.17 |
| TC2100006974.hg.1 | chr21 | SON | SON DNA binding protein | NM_001291411 | 8.54 | 9.30 | 9.70 | -0.76 | -1.16 |
| TC2000007138.hg.1 | chr5 | IL7R | interleukin 7 receptor | NM_002185 | 5.81 | 5.75 | 6.97 | 0.05 | -1.16 |
| TC0300011264.hg.1 | chr3 | IL17RD | interleukin 17 receptor D | NM_01 | | | | | |

| | | | | | | | | | |
|--------------------|-------|---------------|---|------------------|-------|-------|-------|-------|-------|
| TC1300008225.hg.1 | chr13 | PSPC1 | paraspeckle component 1 | NM_001042414 | 8.73 | 9.55 | 9.88 | -0.82 | -1.16 |
| TC0800012362.hg.1 | chr8 | KHDRBS3 | KH domain containing, RNA binding, signal transcr. | NM_006558 | 6.81 | 6.92 | 7.96 | -0.11 | -1.15 |
| TC1100013133.hg.1 | chr11 | HBG2 | hemoglobin, gamma G | NM_000184 | 5.67 | 6.05 | 6.82 | -0.38 | -1.15 |
| TC0100007645.hg.1 | chr1 | TINAGL1 | tubulointerstitial nephritis antigen-like 1 | NM_001204414 | 7.00 | 7.18 | 8.15 | -0.18 | -1.15 |
| TC1100006760.hg.1 | chr11 | PPFIBP2 | PTPRF interacting protein, binding protein 2 (liprin) | NM_001256568 | 5.05 | 5.20 | 6.20 | -0.15 | -1.15 |
| TC2000009023.hg.1 | chr20 | SAMHD1 | SAM domain and HD domain 1 | NM_015474 | 6.04 | 6.62 | 7.19 | -0.58 | -1.15 |
| TC0300013255.hg.1 | chr3 | ZMAT3 | zinc finger, matrin-type 3 | NM_022470 | 7.64 | 8.42 | 8.78 | -0.79 | -1.15 |
| TC0800008715.hg.1 | chr8 | ZHX2 | zinc fingers and homeoboxes 2 | NM_014943 | 6.50 | 7.32 | 7.64 | -0.82 | -1.14 |
| TC0X00009000.hg.1 | chrX | VCX3A | variable charge, X-linked 3A | NM_016379 | 7.08 | 7.03 | 8.22 | 0.05 | -1.14 |
| TC1200012424.hg.1 | chr12 | TMEM132D | transmembrane protein 132D | NM_133448 | 5.45 | 4.96 | 6.59 | 0.49 | -1.14 |
| TC0100007638.hg.1 | chr1 | SERINC2 | serine incorporator 2 | NM_001199037 | 10.30 | 10.95 | 11.43 | -0.65 | -1.13 |
| TC0400009543.hg.1 | chr4 | TLR3 | toll-like receptor 3 | NM_003265 | 5.32 | 6.55 | 6.44 | -1.24 | -1.12 |
| TC0900007618.hg.1 | chr9 | PCSK5 | proprotein convertase subtilisin/kexin type 5 | NM_001190482 | 5.65 | 6.05 | 6.78 | -0.40 | -1.12 |
| TC0200012297.hg.1 | chr2 | TGFA | transforming growth factor alpha | NM_001096961 | 9.21 | 9.35 | 10.33 | -0.14 | -1.12 |
| TC1200008081.hg.1 | chr12 | DYRK2 | dual specificity tyrosine-(Y)-phosphorylation regul. | NM_003583 | 5.85 | 6.23 | 6.96 | -0.38 | -1.11 |
| TC2000013298.hg.1 | chr2 | ST3GAL5 | ST3 beta-galactoside alpha-2,3-sialyltransferase | NM_001042437 | 5.69 | 5.17 | 6.79 | 0.52 | -1.10 |
| TC2000009058.hg.1 | chr20 | TGM2 | transglutaminase 2 | NM_004613 | 10.49 | 11.00 | 11.58 | -0.51 | -1.09 |
| TC0300007617.hg.1 | chr3 | KCTD6 | potassium channel tetramerization domain containi | NM_001128214 | 4.87 | 5.37 | 5.96 | -0.50 | -1.09 |
| TC0Y00006495.hg.1 | chrY | TGIF2LY | TGF β -induced factor homeobox 2-like, Y-linked | NM_139214 | 4.42 | 4.63 | 5.51 | -0.22 | -1.09 |
| TC0100015991.hg.1 | chr1 | SMG5 | SMG5 nonsense mediated mRNA decay factor | NM_015327 | 8.52 | 9.04 | 9.61 | -0.51 | -1.09 |
| TC1900006864.hg.1 | chr19 | MAP2K7 | mitogen-activated protein kinase kinase 7 | NM_001297555 | 6.75 | 7.23 | 7.83 | -0.48 | -1.09 |
| TC1100007220.hg.1 | chr11 | DEPDC7 | DEP domain containing 7 | NM_001077242 | 5.38 | 5.39 | 6.46 | -0.01 | -1.08 |
| TC0900011623.hg.1 | chr9 | PTGES2 | prostaglandin E synthase 2 | NM_001256335 | 6.96 | 7.77 | 8.04 | -0.80 | -1.08 |
| TC1500006925.hg.1 | chr15 | THBS1 | thrombospondin 1 | NM_003246 | 11.87 | 12.06 | 12.95 | -0.19 | -1.08 |
| TC1900007382.hg.1 | chr19 | PGPEP1 | pyroglutamyl-peptidase I | NM_001300927 | 8.14 | 8.66 | 9.22 | -0.52 | -1.07 |
| TC2000007343.hg.1 | chr20 | DHX35 | DEAH (Asp-Glu-Ala-His) box polypeptide 35 | NM_001190809 | 6.34 | 6.74 | 7.41 | -0.40 | -1.07 |
| TC0600014318.hg.1 | chr6 | FAM46A | family with sequence similarity 46, member A | NM_017633 | 7.49 | 7.82 | 8.55 | -0.34 | -1.06 |
| TC1100012574.hg.1 | chr11 | SORL1 | Memczak2013 ANTISENSE, CDS, coding, INTEF | hsa_circ_0000366 | 6.70 | 7.20 | 7.76 | -0.50 | -1.06 |
| TC1100013163.hg.1 | chr11 | APIP | APAF1 interacting protein | NM_015957 | 7.54 | 8.58 | 8.60 | -1.04 | -1.06 |
| TC1900009558.hg.1 | chr19 | ZNF558 | zinc finger protein 558 | NM_001304350 | 6.06 | 6.41 | 7.12 | -0.35 | -1.06 |
| TC2000008104.hg.1 | chr20 | PRPF6 | pre-mRNA processing factor 6 | NM_012469 | 7.90 | 8.32 | 8.95 | -0.42 | -1.05 |
| TC0800012363.hg.1 | chr8 | KHDRBS3 | KH domain containing, RNA binding, signal transcr. | ENST00000522578 | 5.78 | 5.99 | 6.83 | -0.21 | -1.05 |
| TC1200011812.hg.1 | chr12 | CRY1 | cryptochrome circadian clock 1 | NM_004075 | 6.14 | 6.56 | 7.19 | -0.42 | -1.05 |
| TC110000929.hg.1 | chr11 | OR511 | olfactory receptor, family 51, subfamily I, member | NM_001055288 | 5.84 | 5.94 | 6.89 | -0.10 | -1.05 |
| TC1100009926.hg.1 | chr11 | OR51B2 | olfactory receptor, family 51, subfamily B, member | NM_033180 | 5.09 | 5.42 | 6.14 | -0.33 | -1.04 |
| TC0400009765.hg.1 | chr4 | MXD4 | MAX dimerization protein 4 | NM_006454 | 7.73 | 8.45 | 8.78 | -0.72 | -1.04 |
| TC0200008680.hg.1 | chr2 | SLC9A2 | solute carrier family 9, subfamily A (NHE2), cation | NM_003048 | 4.39 | 4.09 | 5.43 | 0.30 | -1.04 |
| TC0900009785.hg.1 | chr9 | LINGO2 | leucine rich repeat and Ig domain containing 2 | NM_001258282 | 4.40 | 4.58 | 5.44 | -0.19 | -1.04 |
| TC0100018443.hg.1 | chr1 | PLPP3 | phospholipid phosphatase 3 | NM_003713 | 8.56 | 7.29 | 9.59 | 1.27 | -1.04 |
| TC0300008853.hg.1 | chr3 | TMEM108 | transmembrane protein 108 | NM_001136469 | 6.39 | 6.25 | 7.42 | 0.13 | -1.03 |
| TC1700008209.hg.1 | chr17 | NGFR | nerve growth factor receptor | NM_002507 | 6.71 | 6.68 | 7.74 | 0.02 | -1.03 |
| TC1100012478.hg.1 | chr11 | CD3D | CD3d molecule, delta (CD3-TCR complex) | NM_000732 | 5.23 | 5.91 | 6.26 | -0.68 | -1.03 |
| TC1400010774.hg.1 | chr14 | FOXN3 | forkhead box N3 | NM_001085471 | 6.12 | 6.58 | 7.14 | -0.46 | -1.03 |
| TC04000010242.hg.1 | chr4 | PPARGC1A | peroxisome proliferator-activated receptor gamm | NM_013261 | 7.69 | 7.64 | 8.72 | 0.05 | -1.02 |
| TC2000009646.hg.1 | chr20 | CTSZ | cathepsin Z | NM_001336 | 9.79 | 10.31 | 10.81 | -0.51 | -1.02 |
| TC1200012161.hg.1 | chr12 | TRIAP1 | TP53 regulated inhibitor of apoptosis 1 | NM_016399 | 8.40 | 9.23 | 9.43 | -0.83 | -1.02 |
| TC0500007452.hg.1 | chr5 | MAP3K1 | mitogen-activated protein kinase kinase kinase 1 | NM_005921 | 5.37 | 5.46 | 6.39 | -0.09 | -1.02 |
| TC0X00007053.hg.1 | chrX | MAOA | monoamine oxidase A | NM_000240 | 6.80 | 7.16 | 7.82 | -0.36 | -1.02 |
| TC0800010002.hg.1 | chr8 | DUSP4 | dual specificity phosphatase 4 | NM_001394 | 10.66 | 10.90 | 11.68 | -0.24 | -1.02 |
| TC0600007067.hg.1 | chr6 | GMPR | guanosine monophosphate reductase | NM_006877 | 6.93 | 7.42 | 7.95 | -0.49 | -1.02 |
| TC0500009610.hg.1 | chr5 | NSD1 | nuclear receptor binding SET domain protein 1 | NM_022455 | 7.60 | 7.82 | 8.61 | -0.23 | -1.02 |
| TC0200012339.hg.1 | chr2 | SLC8A1 | solute carrier family 8 (sodium/calcium exchange) | NM_00112800 | 4.60 | 4.60 | 5.62 | 0.01 | -1.02 |
| TC0600012434.hg.1 | chr6 | ME1 | malic enzyme 1, NADP(+)-dependent, cytosolic | NM_002395 | 8.55 | 9.62 | 9.56 | -1.07 | -1.01 |
| TC1900006932.hg.1 | chr19 | ZNF559-ZNF177 | ZNF559-ZNF177 readthrough | NM_001172650 | 5.47 | 5.72 | 6.48 | -0.26 | -1.01 |
| TC1200012741.hg.1 | chr12 | ANO2 | anoctamin 2, calcium activated chloride channel | NM_001278596 | 4.84 | 4.89 | 5.86 | -0.05 | -1.01 |
| TC1900009518.hg.1 | chr19 | FBN3 | Zhang2013 ALT_ACCEPTOR, ALT_DONOR, coc | hsa_circ_009232 | 5.13 | 5.36 | 6.14 | -0.23 | -1.01 |
| TC0300008561.hg.1 | chr3 | PARP14 | poly(ADP-ribose) polymerase family member 14 | NM_017554 | 8.95 | 9.34 | 9.96 | -0.38 | -1.01 |
| TC0200015093.hg.1 | chr2 | ZNF385B | zinc finger protein 385B | NM_001113397 | 4.41 | 4.94 | 5.42 | -0.53 | -1.01 |
| TC0900011192.hg.1 | chr9 | LPAR1 | lysophosphatidic acid receptor 1 | NM_001401 | 7.19 | 7.56 | 8.20 | -0.37 | -1.01 |
| TC0300011859.hg.1 | chr3 | ZBTB11 | zinc finger and BTB domain containing 11 | NM_014415 | 5.66 | 6.29 | 6.66 | -0.63 | -1.01 |
| TC0900009479.hg.1 | chr9 | RANBP6 | RAN binding protein 6 | NM_001243202 | 5.17 | 5.63 | 6.17 | -0.46 | -1.00 |
| TC0200010421.hg.1 | chr2 | AOX1 | aldehyde oxidase 1 | NM_001159 | 7.96 | 9.02 | 8.96 | -1.06 | -1.00 |
| TC0200009865.hg.1 | chr2 | SCN2A | sodium channel, voltage gated, type II alpha sub | NM_001040142 | 7.06 | 7.54 | 8.07 | -0.47 | -1.00 |

Supplementary Table 3. Sequence of primers for quantitative genomic PCR.

| gene | | | primer |
|------------------------|---------|-------------|--------------------------------------|
| <i>BCL2</i> intron 2/3 | forward | NM_000633 | 5'- CCA GGT TGG GTC TTG ACA G - 3' |
| <i>BCL2</i> intron 2/3 | reverse | NM_000633 | 5'- ATG ATG CCC TTG GTC TTC TGT - 3' |
| <i>BCLXL</i> exon 2 | forward | NM_138578.3 | 5'- CCG GGA GCT GGT GGT TG - 3' |
| <i>BCLXL</i> exon 2 | reverse | NM_138578.3 | 5'- CCT GTT CTC TTC CAC ATC ACT - 3' |
| <i>MCL1</i> exon 1 | forward | NM_021960 | 5'- TGG CGT GCA GCG CAA CC - 3' |
| <i>MCL1</i> intron 1/2 | reverse | NM_021960 | 5'- GGA GTG AGG CCT TGG CG - 3' |
| <i>LINE1</i> | forward | | 5'- TGC TTT GAA TGC GTC CCA GAG -3' |
| <i>LINE1</i> | reverse | | 5'- AAA GCC GCT CAA CTA CAT GG - 3' |

PCR conditions: 59°C, 35 cycles.