Supplementary Materials for

BCL-2 inhibition with ABT-737 prolongs survival in an NRAS/BCL-2 mouse model of AML by targeting primitive LSK and progenitor cells

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This pdf includes:

Materials and Methods

Tissue and cell preparation, flow cytometry

Blood was obtained from anaesthetized animals (with isoflurane) by venipuncture of retro-orbital venus plexus into EDTA tubes. Differential blood counts were obtained using an automated hematology analyzer (Cell Dyn, Abbott Diagnostics, France or Medonica, Kitvia, France). White peripheral blood (PB) cells were analyzed by flow cytometry as previously described[1] (FACSCalibur, Becton Dickinson, San Jose, California, USA); PB BCL-2 expression was performed by flow cytometry using the human specific BCL-2 antibody (BD Pharmingen, San Diego, CA, USA). Bone marrow (BM) was obtained by flushing long bones with Hank's balanced salts solution followed by filtering through a nylon mesh. PB and BM smears were prepared according to standard hematological techniques. Bone marrow smears were stained and examined by a cytologist of Hôpital Saint-Louis. The tissue sections were examined by the Head of Histopathology of Hôpital Saint-Louis; and classified according to the Bethesda proposal[2] where blast equivalents are designated as "Immature Forms/Blasts", which for the purposes of convenience are referred to as blasts herein. Percentage blasts were determined from the BM smears by counting 100-200 cells. Lin^- fractions were separated using an AutoMacs separator (Miltenyi, Auburn, CA). The lineage depletion kit contained a mixture of specific biotinylated antibodies CD5 (T-cell antigen), CD45R (lymphocyte antigen), Mac-1, Gr-1(Lys-6G) (granulo-macrophagic differentiation antigens) and Ter119 (early erythroid antigen). BM LSK cells were estimated using antibodies Sca-1 conjugated with fluorescent isothiocyanate (FITC) and KIT conjugated with phycoerythrin (PE) (Becton Dickinson, San Jose, CA). Livers and spleens were fixed overnight in buffered formalin and embedded in paraffin, sectioned and stained by the Hôpital Saint-Louis Histopathology department. Splenocytes were obtained by soft dilaceration of the spleen with the piston of a 5 ml Syringe in a petri dish. Cells are washed in PBS, filtered through a 40 μm nylon mesh and then density centrifugation was conducted using Lymphoprep (Eurobio, France) to isolate mononuclear splenocytes.

Progenitor Assay

Progenitor assays were performed using the Methocult® media as recommended by the manufacturer (Stem Cell Technology, Vancouver). This assay kit contained rm-Stem Cell Factor, rmIL-3, rhIL-6 growth factors and insulin and transferrin. Briefly 10^6 bone marrow cells were centrifuged and resuspended in 3.3 ml Iscove's media supplemented with 2% heat inactivated fetal calf serum (FCS), 2 mM glutamine, 5 UI/ml penicillin, 300 mg/ml streptomycin. 0.3 ml of cells was added to 3 ml of Methocult® and 1 ml ($3x10^4$) was plated per 35 mm dish (in triplicate). Cultures were incubated for 7 days at 37°C, 5% CO_2 in air and > 95% humidity. Identification and counts of colonies were done according to the technical manual of the manufacturer. Colonies were counted on day 7 and the mean of the first two dishes plated was scored.

Immunofluorescence and confocal microscopy

A TRITC directly conjugated hBCL-2 (Santa Cruz Biotechnology, CA), an anti-NRAS monoclonal antibody was visualized with a goat anti-mouse Alexa 647 secondary antibody and anti-mitochondria antibody Tom 20 (Santa Cruz Biotechnology, CA) visualized with a goat anti-rabbit Alexa 488 secondary antibody were used. The fluorescent lectin (Alexa Fluor 488) wheat germ agglutinin (Molecular Probes, Invitrogen, Paisley) was used as a plasma membrane marker for mouse cells. Slides were analyzed by confocal microscopy on a Zeiss LSM 510 META confocal laser microscope (Zeiss, Iena, Germany).

Flow cytometric apoptosis assessment:AnnexinV/7AAD

Briefly, single cell suspensions were prepared from spleen cells and cultured in low-serum/cytokine mixture (IMDM/2% FCS/IL-3/SCF/G-CSF/GM-CSF (5 ng/ml)) for 24 h as recommended by the manufacturer (BD Biosciences, Oxford, UK). $3x10^5$ cells were

collected by centrifugation and labelled with Annexin V-Cy5 (BioVision Inc, CA) and 7-AAD (BD Biosciences, Oxford, UK) according to manufacturers' instructions.

Mitochondrial membrane potential (MMP)

Briefly, splenocytes were resuspended at $1x10^6$/ml in 1xPBS with 50 nM $DiOC_2(3)$ (Invitrogen, Carlsbad, CA) and incubated at 37°C for 30 min. Cells were washed in 1xPBS and analysed by flow cytometry using the 488 nm excitation laser and 530/30 nm bandpass and 670 nm longpass filters. The accumulation of the $DiOC_2(3)$ dye within the mitochondria measured by emission in the green/red channels following excitation reflects the membrane potential.

ANX-Scintigraphy

Scintigraphic imaging or Single-Photon Emission Computed Tomography (SPECT) was performed under pentobarbital anesthesia (4 mg/100 g body weight; Ceva Santé Animale, Libourne, France) in mice, after intravenous injection of ANX. Planar images were obtained 0 to 45 minutes (dynamic acquisition: 15 images, image duration: 60 seconds, static acquisitions of 10 minutes duration) after ANX injection. Images were acquired 10 minutes after injected dose of ANX. In addition, mice which had previously undergone planar imaging underwent abdominal X/tomoscintigraphy acquisition: mod-list tomographic acquisition was performed during continuous rotation of the animal placed between 2 parallel collimators (360° rotation per minute, acquisition duration: 60 minutes from 1 hour to 2 hours after ANX injection). All acquisitions were performed using a dedicated small animal IMAGER-S/CT system (Biospace Mesures, Paris, France) equipped with parallel low-energy high-resolution collimators (matrix 128x128, 15% energy window centred on 140 KeV). ANX uptake in hepato-splenic area was visually assessed, and activity (mean counts per pixel) ratios between pre and post treatment (determined on early dynamic images) and underlying background areas were computed on planar images.

TUNEL

Quantitative data on tissue sections were assessed blindly by 2 pathologists (AJ, CL) on an Olympus ProvisAX-70 microscope (Olympus, Japan), with wide-field eyepiece number 26.5, providing a field size of 0.344 mm^2 at 400× magnification. Cell counts were performed on three different fields per section, and expressed as the mean number of cells per field (400 × magnification) using the Olympus SIS software system.

RAS activation assays and Western Blotting

$5x10^5$ cells were lysed in 50 mmol/L Tris (pH 7.4), 1% NP40, 15% glycerol, 200 mmol/L NaCl, 5 mmol/L $MgCl_2$, 5 mmol/L NaF, 1 μmol/L leupeptin, 0.1 μmol/L aprotinin, and 1 mmol/L phenylmethylsulfonyl fluoride. Detergent-insoluble material was removed by centrifugation (16,000 g at 4°C for 20 min) and assayed for RAS activation using the GST-Raf1-Ras Binding Domain protein as previously described.[2] Densitometric analysis for the pulldowns was performed using the Aida Image Analyzer. The background was subtracted, and the signals of the detected bands were normalized to the amount of respective β-actin loading control band. The relative values were presented as fold increase over control samples as indicated (error bar = SD; n=3). For Western blots Cyclin D1 and D3, $p27^{KIP1}$, Phospho $p38^{MAPK}$, $BCL_{XL,\ p}$BCL-2 threonine and serine antibodies were obtained from Cell Signaling Technology, Beverly, MA); $p21^{Waf1/Cip1}$, $p15^{INK4B}$**,** MCL-1, ERK and AKT specific antibodies were obtained from Santa Cruz Biotechnology, CA,

Effect of ABT-737 on AML spleen cells *Ex Vivo*

Splenocytes were prepared as above, resuspended at $1x10^6$/ml in culture media (IMDM/2% FCS/IL-3/SCF/G-CSF/GM-CSF (5 ng/ml) with 10, 100 or 500 nM of ABT-737 dissolved in DMSO and incubated at 37°C for 24 hours. Cells were washed in 1xTBS and analysed by Western blotting using ppERK and pAKT antibodies with β-actin as a control for loading (Cell Signaling Technology, Beverly, MA).

Affymetrix exon array hybridization

For each of the six arrays (three mice each of untreated and ABT-737 treated $_{MRP8}$[NRAS/BCL-2] mice), 100 ng of total RNA was first mixed with bacterial transcripts and the mixture was reverse transcribed into cDNA. After synthesis of double-stranded cDNA, an *in vitro* transcription reaction was conducted overnight. Resulting amplified cRNA were reverse transcribed into sense DNA incorporating dUTP. This single stranded DNA was treated with a combination of uracil DNA glycosylase and apurinic/apyrimidinic endonuclease 1. DNA fragments were biotin-labeled by terminal deoxynucleotidyl transferase. Targets were finally prepared according Affymetrix recommendations for hybridization of exon arrays. Microarrays were hybridized, washed and scanned using Affymetrix instruments. Total RNAs RIN values were between 8.3 and 9. Raw data are controlled with Expression console (Affymetrix).

Array data and statistical analysis

Exon Array data were normalized using quantile normalization. Background correction was made by using the antigenomic probes and probe selection was made as described previously.[3] Only probes targeting exons annotated from FAST DB® transcripts were selected in order to focus on well-annotated genes, whose mRNA sequences are in public databases.[4] Among these selected probes, bad-quality probes (e.g. probes identified by Affymetrix as “cross-hybridizing”) and probes with too low intensity signal compared to antigenomic background probes with the same GC content were removed from the analysis. Only probes with a DABG P value ≤ 0.05 in at least half of the arrays were considered for statistical analysis.[4] Only genes expressed in at least one compared condition were analyzed (*i.e.* untreated and ABT-737 treated mice). To be considered as expressed, the DABG p-value had to be ≤ 0.05 for at least half of the gene probes. We performed an unpaired Student’s t-test to compare gene intensities in the different biological replicates.

Reference

1. Omidvar N, Kogan S, Beurlet S et al. BCL-2 and mutant NRAS interact physically and functionally in a mouse model of progressive myelodysplasia. Cancer Res 2007;67:11657-11667.

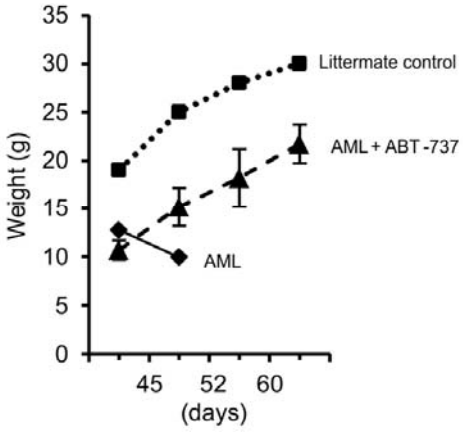
2. Kogan SC, Ward JM, Anver MR et al. Bethesda proposals for classification of nonlymphoid hematopoietic neoplasms in mice. Blood 2002;100:238-245.

3. de la Grange P, Gratadou L, Delord M, Dutertre M, Auboeuf D. Splicing factor and exon profiling across human tissues. Nucleic Acids Res 2010;38:2825-2838.

4. de la Grange P, Dutertre M, Martin N, Auboeuf D. FAST DB: a website resource for the study of the expression regulation of human gene products. Nucleic Acids Res 2005;33:4276-4284.

Figure S1

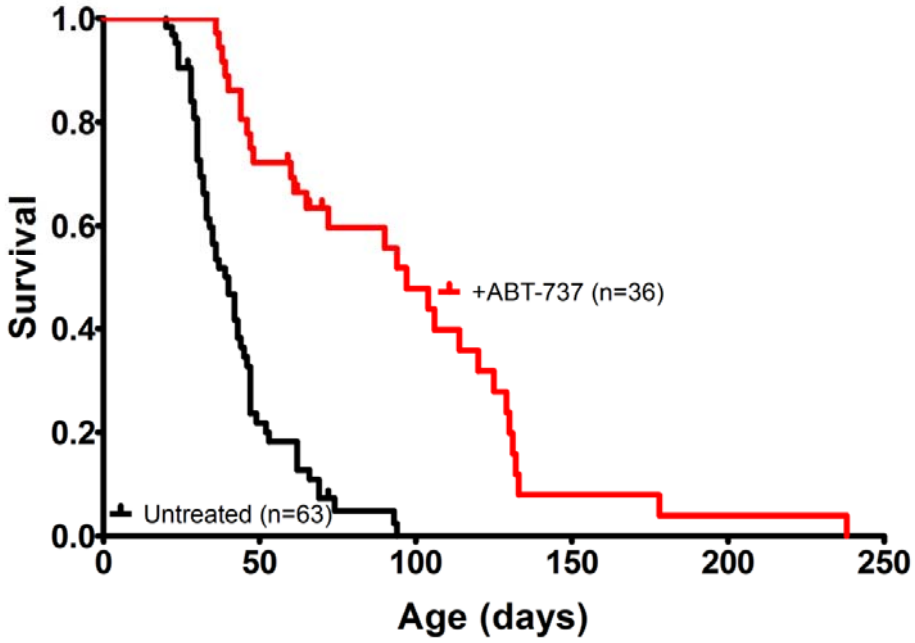
Increased weight of AML mice after ABT-737 treatment



Reduced size of AML compared to littermate. AML mouse on the right with wild-type littermate on the left and increased weight of AML mice after treatment. Weight of AML mice at 3 weeks (Mean±SD of 3 mice) of untreated diseased mice (closed diamond and solid line) compared to litter mate (n=3, closed square and small dotted line) and treated mice (n=6, closed triangle and dashed line).

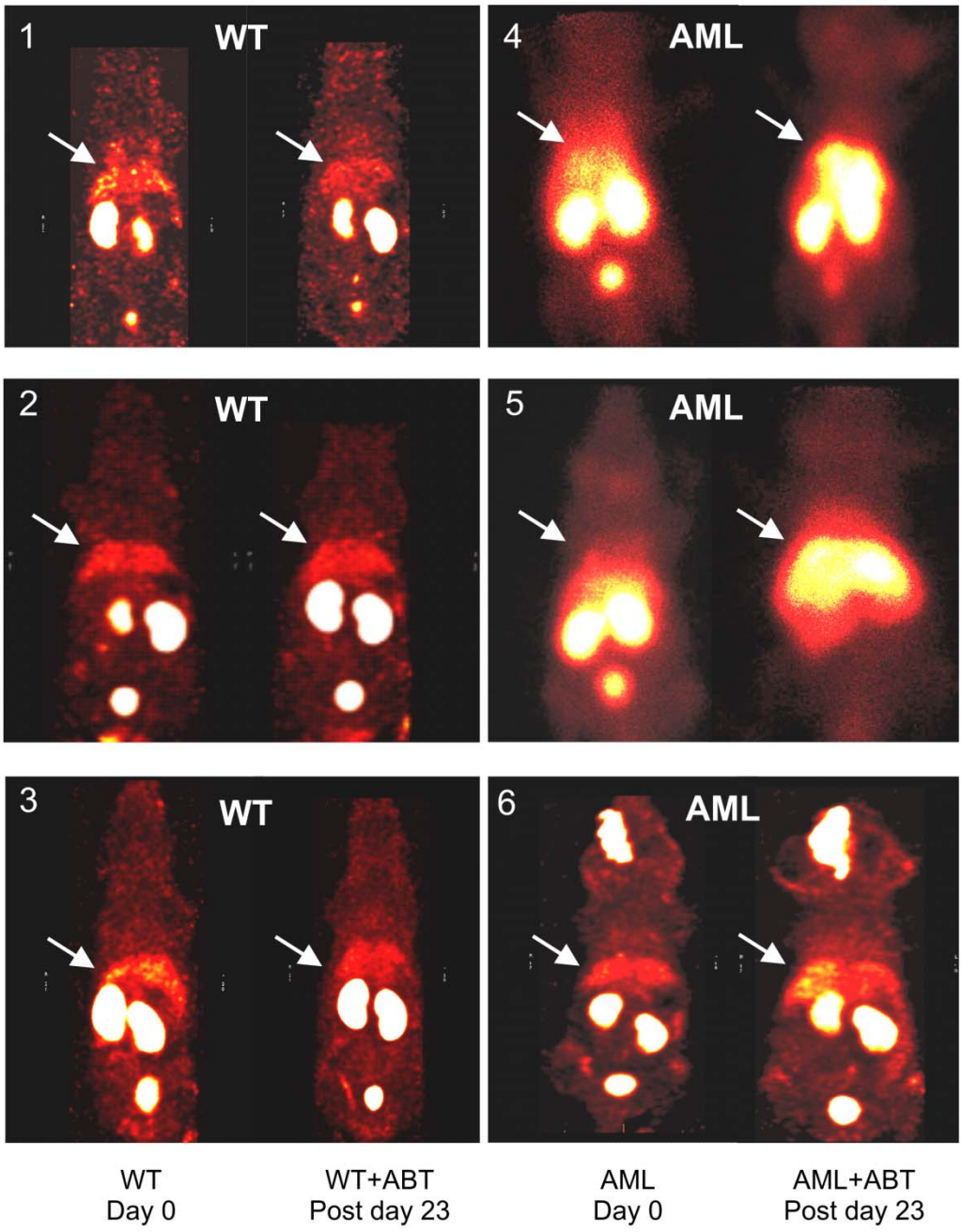
Figure S2

Kaplan-Meier survival curves showing prolonged survival of AML mice treated with ABT-737



Treated mice (n=36, red line) compared with untreated (n=63, black line) plotted from date of birth ($p<0.0001$).

Supplement S3. Radioisotope heat map of Tc-99 m labelled Annexin-V



Increased apoptosis of AML treated mice. Paired untreated and treated radioisotope heat maps of Tc-99m labeled Annexin-V of AML and WT mice (n=3 in each group).

Supplementary Table S1. List of the 997 Regulated Genes of AML mice treated with ABT-737(Fold-change ≥ 1.5; P-Value ≤ 0.05); 764 upregulated and 233 downregulated genes.

GEO Accession No.: GSE48601

Gene Symbol	Regulation	Fold-Change	P-Value	Gene Coordinates (hg19)	UCSC Link	Gene Name	Aliases and Synonyms	Representative Transcript ID	Entrez Gene ID	EnsEMBL ID	Intensity NRAS-BCL2	Intensity NRAS-BCL2 ABT-737
Mmp9	up	7.50	3.48E-03	chr2(+):164773730-164781348	UCSC	matrix metallopeptidas	B/MMP9 // Clg4b // GelatinaseB	D12712	17395	ENSMUSG00000017737	9.57	12.47
Fpr1	up	7.39	3.10E-03	chr17(-):18013452-18020905	UCSC	formyl peptide receptc	fMLF-R // FPR	AK137714	14293	ENSMUSG00000045551	7.92	10.80
Stfa3	up	6.73	1.54E-02	chr16(-):36450623-36455480	UCSC	stefin A3	Stf3	AK014349	20863	ENSMUSG00000054905	8.57	11.32
---	up	6.57	2.88E-02	chr11(-):116981960-116982772	UCSC	---	---	BC104141	---	---	7.22	9.94
Cxcr2	up	6.33	3.86E-03	chr1(+):74200562-74207812	UCSC	chemokine (C-X-C mo	CD128 // Cmkar2 // Gpcr16 // IL-	BC051677	12765	ENSMUSG00000026180	8.59	11.26
Il1f9	up	6.23	6.12E-03	chr2(+):24041999-24054734	UCSC	interleukin 1 family, m	---	AK156687	215257	ENSMUSG00000044103	8.98	11.62
Tm4sf1	up	6.22	3.68E-02	chr3(-):57089533-57105892	UCSC	transmembrane 4 sup	12A8targetantigen // L6 // L6antic	AK134603	17112	ENSMUSG00000027800	7.54	10.18
Igll1	up	6.15	3.62E-02	chr16(-):16860767-16864079	UCSC	immunoglobulin lambc	Igl-5 // Igll // Lambda5	AK137552	---	ENSMUSG00000075370	7.48	10.10
Dhrs9	up	6.14	1.36E-02	chr2(+):69218500-69242590	UCSC	dehydrogenase/reduct	C730025I08Rik // Rdh15	AK080914	241452	ENSMUSG00000027068	6.98	9.60
Irg1	up	5.92	4.02E-03	chr14(+):103446192-103455790	UCSC	immunoresponsive ge	---	AK152635	16365	ENSMUSG00000022126	7.14	9.71
Mmp8	up	5.55	1.10E-02	chr9(+):7558448-7568486	UCSC	matrix metallopeptidas	Collagenase-2	AK089336	17394	ENSMUSG00000005800	8.55	11.02
Tnfrsf23	up	5.22	2.20E-03	chr7(-):150851714-150871781	UCSC	tumor necrosis factor r	mDcTrailr1 // mSOB // Tnfrh1	AK170037	79201	ENSMUSG00000037613	7.38	9.76
Slfn4	up	5.16	1.28E-02	chr11(+):82988688-83003717	UCSC	schlafen 4	---	BC044865	20558	ENSMUSG00000000204	8.71	11.08
Gm5483	up	5.13	2.63E-02	chr16(+):36184298-36188194	UCSC	predicted gene 5483	---	AK089257	433016	ENSMUSG00000079597	7.37	9.73
Slc7a11	up	4.96	5.96E-03	chr3(-):49696447-50247536	UCSC	solute carrier family 7	9930099M05Rik // sut // Systemx	AY766237	26570	ENSMUSG00000027737	7.76	10.07
Ccl2	up	4.95	3.48E-03	chr11(+):81849077-81850954	UCSC	chemokine (C-C motif	HC11 // MCAF // MCP-1 // MCP1	AK153520	20296	ENSMUSG00000035385	7.81	10.12
Cxcl2	up	4.89	1.21E-02	chr5(+):91332896-91334964	UCSC	chemokine (C-X-C mo	CINC-2a // Gro2 // GROb // Mgsa	AK155874	20310	ENSMUSG00000058427	9.92	12.21
D730048J04Rik	up	4.88	5.12E-03	chr17(-):43671137-43672050	UCSC	RIKEN cDNA D73004	---	AK021352	---	---	6.67	8.96
Padi4	up	4.79	1.92E-02	chr4(-):140301607-140330119	UCSC	peptidyl arginine deim	PADtypeIV // Pdi4	AK137625	18602	ENSMUSG00000025330	6.97	9.23
---	up	4.61	3.84E-02	chr6(-):69327937-69328199	UCSC	---	---	X79554	---	---	9.14	11.35
---	up	4.47	1.74E-02	chr6(+):67741219-67741492	UCSC	---	---	U29616	---	---	8.15	10.31
Retnlg	up	4.47	3.47E-02	chr16(+):48872757-48874609	UCSC	resistin like gamma	Fizz3 // Relmg // Xcp1	AJ536019	245195	ENSMUSG00000022651	10.39	12.55
1700047M11Rik	up	4.45	3.65E-02	chr1(+):184218245-184233420	UCSC	RIKEN cDNA 170004	---	AK047804	67330	---	6.73	8.88
Alox5	up	4.41	2.51E-02	chr6(-):116360098-116411163	UCSC	arachidonate 5-lipoxy	5-LO // 5-LOX // 5LO // 5LX	AK136868	11689	ENSMUSG00000025701	8.88	11.02
Asprv1	up	4.40	3.79E-02	chr6(+):86577432-86579197	UCSC	aspartic peptidase, ret	2300003P22Rik // SASP // SASP	BC157058	67855	ENSMUSG00000033508	7.13	9.27
Spp1	up	4.32	1.38E-02	chr5(+):104864136-104870067	UCSC	secreted phosphoprot	2ar // 44kDabonephosphoprotein	AK160540	20750	ENSMUSG00000029304	9.58	11.69
---	up	4.27	2.56E-02	chr7(+):150735217-150735792	UCSC	---	---	AK013067	---	---	6.44	8.53
S100a6	up	4.20	1.08E-02	chr3(+):90417104-90418336	UCSC	S100 calcium binding	2A9 // 5B10 // Cacy // CALCYCLI	AK151144	20200	ENSMUSG00000001025	9.19	11.26
Upp1	up	4.18	1.17E-02	chr11(+):9018105-9036172	UCSC	uridine phosphorylase	UdRPase // Up // UPase	D44464	22271	ENSMUSG00000020407	7.55	9.62
Myo1d	up	4.13	1.68E-02	chr11(-):80295629-80593528	UCSC	myosin ID	9930104H07Rik // D11Ertd9e	BC039700	338367	ENSMUSG00000035441	7.22	9.27
Clec4d	up	4.12	1.18E-02	chr6(+):123212127-123225283	UCSC	C-type lectin domain f	Clecsf8 // mcl // mMCL // Mpcl	AK089500	17474	ENSMUSG00000030144	7.00	9.04
Gm5416	up	4.11	1.70E-02	chr16(+):36210490-36217874	UCSC	predicted gene 5416	---	BC115936	408196	ENSMUSG00000068320	5.42	7.45
Fosl1	up	4.02	3.13E-02	chr19(+):5447545-5455945	UCSC	fos-like antigen 1	fra-1 // Fra1	AK144785	14283	ENSMUSG00000024912	7.75	9.76
Steap4	up	3.94	1.36E-02	chr5(+):7960455-7982212	UCSC	STEAP family membe	1110021O17Rik // Tiarp // Tnfaip	AJ319746	117167	ENSMUSG00000012428	6.14	8.12
Hdc	up	3.94	1.44E-02	chr2(-):126419398-126444416	UCSC	histidine decarboxylas	Hdc-a // Hdc-c // Hdc-e // Hdc-s /	AK133455	15186	ENSMUSG00000027360	8.23	10.20
Mmp25	up	3.94	3.51E-02	chr17(-):23766146-23782237	UCSC	matrix metallopeptidas	F730048C11Rik // Leukolysin // M	BC059059	240047	ENSMUSG00000023903	8.43	10.40
Bst1	up	3.92	5.32E-03	chr5(+):44210147-44234550	UCSC	bone marrow stromal	114/A10 // Bp3 // Bsta1 // CD157	L32812	12182	ENSMUSG00000029082	8.14	10.11
---	up	3.90	2.62E-02	chr12(+):8506232-8509364	UCSC	---	---	AK143170	---	---	5.26	7.22
---	up	3.88	3.81E-02	chr5(-):44175285-44177356	UCSC	---	---	AK155529	---	---	5.98	7.94
Mctp1	up	3.88	2.42E-02	chr13(+):76522407-77171071	UCSC	multiple C2 domains, t	2810465F10Rik	AK047562	78771	ENSMUSG00000021596	6.79	8.74
Chst1	up	3.86	3.14E-02	chr2(+):92440029-92455407	UCSC	carbohydrate (keratan	2610008E20Rik // C6ST // GST-	AK134997	76969	ENSMUSG00000027221	6.82	8.77
---	up	3.82	2.56E-03	chr17(-):74226579-74229003	UCSC	---	---	AK085737	---	---	6.42	8.35
Lilra6	up	3.78	2.72E-03	chr7(-):3859882-3867107	UCSC	leukocyte immunoglob	7M1 // Pira3	AK030846	18726	ENSMUSG00000030427	7.83	9.75
Niacr1	up	3.76	6.26E-03	chr5(-):124313581-124315509	UCSC	niacin receptor 1	Gpr109a // Gpr109b // HM74 // P	AK150795	80885	ENSMUSG00000045502	8.24	10.15
Ifitm6	up	3.70	3.53E-02	chr7(-):148201605-148202807	UCSC	interferon induced tran	fragilis5	AK039626	213002	ENSMUSG00000059108	10.35	12.24
6430548M08Rik	up	3.68	2.43E-02	chr8(+):122638050-122689204	UCSC	RIKEN cDNA 643054	mKIAA0513	AK133157	234797	ENSMUSG00000031824	8.07	9.94
A430107O13Rik	up	3.65	4.56E-02	chr6(+):21935907-22205365	UCSC	RIKEN cDNA A43010	---	BC151018	214642	ENSMUSG00000062980	6.70	8.57
Ankrd22	up	3.61	3.85E-02	chr19(-):34197039-34240545	UCSC	ankyrin repeat domain	5430429D21Rik // D19Ertd675e	AK017360	52024	ENSMUSG00000024774	7.13	8.99
---	up	3.58	1.14E-02	chr19(+):10013755-10015142	UCSC	---	---	AK155738	---	---	5.51	7.35
D930030O05Rik	up	3.53	3.46E-03	chr7(+):75251581-75258241	UCSC	RIKEN cDNA D93003	---	AK083489	---	---	7.24	9.06
Itgb2l	up	3.51	3.55E-02	chr16(-):96643898-96665222	UCSC	integrin beta 2-like	5033406G21Rik // pactolus	AK158108	16415	ENSMUSG00000000157	7.10	8.91
Pygl	up	3.41	2.27E-02	chr12(-):71291799-71332475	UCSC	liver glycogen phosph	---	AK149491	110095	ENSMUSG00000021069	8.29	10.06
Il1r2	up	3.41	1.76E-02	chr1(+):40141586-40182068	UCSC	interleukin 1 receptor,	CD121b // IL-1receptorbetachain	AK132264	16178	ENSMUSG00000026073	8.58	10.35
Raet1d // Raet1e	up	3.38	2.53E-02	chr10(+):21878373-22093943	UCSC	retinoic acid early tran	RAE-1delta // Rae-1epsilon	FJ594066	379043 // 56554	000053219 // ENSMUSG	6.89	8.65
Csf3r	up	3.36	2.40E-02	chr4(+):125701903-125722219	UCSC	colony stimulating fact	Cd114 // Csfgr // G-CSFR	AK144318	12986	ENSMUSG00000028859	9.05	10.80
Rasgrp4	up	3.35	1.77E-02	chr7(+):29919950-29938971	UCSC	RAS guanyl releasing	---	AK089282	233046	ENSMUSG00000030589	8.59	10.33
---	up	3.33	4.62E-02	chr6(-):129453790-129456461	UCSC	---	---	AK080920	---	---	6.84	8.57
Stfa1	up	3.32	2.28E-02	chr16(+):36277265-36285457	UCSC	stefin A1	Stf1	M92417	20861	ENSMUSG00000071562	10.68	12.41
Stfa2l1	up	3.30	2.21E-02	chr16(+):36156896-36162038	UCSC	stefin A2 like 1	---	AK050597	268885	ENSMUSG00000059657	9.61	11.33
---	up	3.29	8.12E-03	chr11(-):74290802-74293812	UCSC	---	---	AK144288	---	---	6.87	8.59
---	up	3.26	1.19E-02	chr19(-):10056413-10056981	UCSC	---	---	AK145157	---	---	6.02	7.73
Thbs1	up	3.24	4.96E-02	chr2(+):117937624-117952868	UCSC	thrombospondin 1	tbsp1 // Thbs-1 // TSP-1 // TSP1	AK145202	21825	ENSMUSG00000040152	8.86	10.56
Actn1	up	3.24	6.32E-03	chr12(-):81268535-81361352	UCSC	actinin, alpha 1	3110023F10Rik	BC054830	109711	ENSMUSG00000015143	8.94	10.64
Arg2	up	3.23	1.11E-02	chr12(+):80231803-80257287	UCSC	arginase type II	AII	U90886	11847	ENSMUSG00000021125	6.90	8.59
---	up	3.22	2.57E-02	chr11(+):107289590-107297000	UCSC	---	---	AK146139	---	---	6.07	7.76
Hal	up	3.19	4.53E-02	chr10(+):92951513-92979506	UCSC	histidine ammonia lya	histidase // Hsd	AK014518	15109	ENSMUSG00000020017	7.75	9.43
---	up	3.19	3.15E-02	chr7(-):50779586-50781749	UCSC	---	---	AK149443	---	---	8.76	10.43
A530064D06Rik	up	3.16	4.52E-02	chr17(-):48286076-48304221	UCSC	RIKEN cDNA A53006	---	AK171433	328830	ENSMUSG00000043939	7.86	9.52
Fpr2 // Fpr3	up	3.14	1.44E-02	chr17(+):18024786-18108641	UCSC	formyl peptide receptc	E330010I07Rik // Fpr-rs1 // Fpr-r	U78299	14289 // 14294	000052270 // ENSMUSG	8.98	10.63
F2rl2	up	3.13	2.20E-02	chr13(+):96466808-96472694	UCSC	coagulation factor II (tl	PAR3	AK089444	14064	ENSMUSG00000021675	7.68	9.33
Ednra	up	3.11	4.70E-03	chr8(-):80186930-80248364	UCSC	endothelin receptor ty	ET-AR // ETa // Gpcr10	AK043210	13617	ENSMUSG00000031616	6.34	7.98
---	up	3.10	2.66E-02	chr6(-):125429069-125430998	UCSC	---	---	AK051196	---	---	6.35	7.98
Mapk13	up	3.10	3.00E-02	chr17(+):28906274-28915649	UCSC	mitogen-activated prot	p38deltaMAPkinase // SAPK4 //	AK146993	26415	ENSMUSG00000004864	7.76	9.39
Pilrb2	up	3.07	4.43E-02	chr5(-):138307057-138312987	UCSC	paired immunoglobin-l	EG545812	AK036467	545812	ENSMUSG00000066682	7.68	9.30
Pnpla1	up	3.07	4.95E-02	chr17(+):28995354-29027253	UCSC	patatin-like phospholip	---	AK132521	433091	ENSMUSG00000043286	5.90	7.52
F5	up	3.07	2.34E-02	chr1(+):166081962-166150405	UCSC	coagulation factor V	Cf-5 // Cf5	AK137537	14067	ENSMUSG00000026579	7.49	9.11
Aqp9	up	3.06	3.62E-03	chr9(-):70958468-71011096	UCSC	aquaporin 9	1700020I22Rik	AK050042	64008	ENSMUSG00000032204	7.36	8.97
---	up	3.06	1.57E-02	chr10(+):3363460-3364255	UCSC	---	---	BC053976	---	---	7.16	8.77
Pi16	up	3.06	2.08E-02	chr17(+):29455820-29466358	UCSC	peptidase inhibitor 16	1200009H11Rik	AB046537	74116	ENSMUSG00000024011	7.47	9.08
Siglec5	up	3.05	2.85E-02	chr7(+):50606709-50614901	UCSC	sialic acid binding Ig-li	mSiglec-F // Siglecf	AK146203	233186	ENSMUSG00000039013	6.75	8.37
---	up	3.04	2.47E-02	chr14(-):98210625-98213314	UCSC	---	---	AK051863	---	---	5.75	7.35
Lrg1	up	3.03	2.83E-02	chr17(-):56259100-56261369	UCSC	leucine-rich alpha-2-gl	1300008B03Rik // 2310031E04R	BC030733	76905	ENSMUSG00000037095	9.07	10.67
---	up	3.02	3.05E-02	chr6(-):68860408-68860687	UCSC	---	---	AJ697688	---	---	9.65	11.24
Tiam2	up	3.02	1.75E-02	chr17(+):3326573-3531344	UCSC	T-cell lymphoma invas	3000002F19Rik // mKIAA2016 //	BC067048	24001	ENSMUSG00000023800	6.05	7.65

Supplementary Table S1. List of the 997 Regulated Genes of AML mice treated with ABT-737(Fold-change ≥ 1.5; P-Value ≤ 0.05); 764 upregulated and 233 downregulated genes.

GEO Accession No.: GSE48601

Gene Symbol	Regulation	Fold-Change	P-Value	Gene Coordinates (hg19)	UCSC Link	Gene Name	Aliases and Synonyms	Representative Transcript ID	Entrez Gene ID	EnsEMBL ID	Intensity NRAS-BCL2	Intensity NRAS-BCL2 ABT-737
4933412O06Rik	up	3.02	2.92E-02	chr13(-):15873497-15894465	UCSC	RIKEN cDNA 493341	---	AK016796	---	---	5.45	7.04
Tarm1	up	2.98	4.19E-02	chr7(-):3487791-3503442	UCSC	T cell-interacting, activ	9930022N03Rik // Gm9904	AK155804	245126	ENSMUSG00000053338	7.70	9.28
Ptgs2	up	2.97	8.92E-03	chr1(+):151947229-151955147	UCSC	prostaglandin-endope	Cox-2 // COX2 // cyclooxygenase	M88242	19225	ENSMUSG00000032487	7.82	9.39
Pla2g5	up	2.96	4.61E-02	chr4(-):138355159-138419383	UCSC	phospholipase A2, grc	sPLA2	AK090021	18784	ENSMUSG00000041193	6.08	7.65
9830107B12Rik	up	2.89	3.70E-02	chr17(-):48262555-48283218	UCSC	RIKEN cDNA 983010	---	AK079398	328829	ENSMUSG00000073386	7.05	8.57
---	up	2.89	2.15E-02	chr15(-):82823800-82826136	UCSC	---	---	AK159337	---	---	8.86	10.40
Trem1	up	2.87	4.87E-02	chr17(+):48371933-48386091	UCSC	triggering receptor exp	---	AK089439	58217	ENSMUSG00000042265	9.40	10.92
Wipi1	up	2.86	4.98E-02	chr11(-):109434646-109472747	UCSC	WD repeat domain, ph	4930533H01Rik // D11Ertd498e	AK159608	52639	ENSMUSG00000041895	6.96	8.47
Mt2	up	2.85	1.22E-02	chr8(+):96696683-96697462	UCSC	metallothionein 2	Mt-2 // MT-II	AK002567	17750	ENSMUSG00000031762	8.52	10.03
Adam8	up	2.85	2.09E-02	chr7(-):147164832-147178437	UCSC	a disintegrin and meta	CD156 // CD156a // E430039A18	BC025584	11501	ENSMUSG00000025473	8.90	10.41
5430425K12Rik	up	2.84	3.38E-02	chr13(+):81080319-81087858	UCSC	RIKEN cDNA 543042	---	AK017339	---	---	5.12	6.63
---	up	2.83	1.40E-03	chr7(+):75196005-75198972	UCSC	---	---	AK053468	---	---	7.03	8.53
---	up	2.82	2.50E-02	chr7(-):71051746-71052522	UCSC	---	---	AK138320	---	---	7.93	9.43
Dgkg	up	2.82	3.77E-02	chr16(-):22468534-22657295	UCSC	diacylglycerol kinase,	2900055E17Rik // Dagk3 // E430	AK220294	110197	ENSMUSG00000022861	7.83	9.33
Entpd3	up	2.81	1.94E-03	chr9(+):120448948-120477435	UCSC	ectonucleoside triphos	Cd39l3 // HB6 // NTPDase-3	AK046218	215446	ENSMUSG00000041608	6.69	8.18
1810033B17Rik	up	2.80	4.99E-02	chr8(+):3665754-3669259	UCSC	RIKEN cDNA 181003	---	AK087121	69189	ENSMUSG00000013974	8.52	10.00
---	up	2.78	8.44E-03	chr8(-):11457471-11459742	UCSC	---	---	AK157419	---	---	5.89	7.36
Ltf	up	2.77	3.99E-02	chr9(+):110921794-110945270	UCSC	lactotransferrin	lactoferrin // Lf	AK036491	17002	ENSMUSG00000032496	11.29	12.77
Tas2r143	up	2.77	5.26E-03	chr6(+):42350237-42351122	UCSC	taste receptor, type 2,	mt2r36 // Tas2r43	BC148239	387514	ENSMUSG00000046652	6.67	8.14
C5ar1	up	2.76	2.74E-02	chr7(-):16832094-16844687	UCSC	complement compone	C5aR // C5r1 // Cd88 // D7Msu1	AK158027	12273	ENSMUSG00000049130	8.84	10.31
Cpeb3	up	2.72	1.90E-02	chr19(-):37096369-37281999	UCSC	cytoplasmic polyaden	4831444O18Rik // mKIAA0940	AB093274	208922	ENSMUSG00000039652	6.54	7.98
Cd300lf	up	2.72	2.10E-02	chr11(-):114977533-114995306	UCSC	CD300 antigen like fa	CLM-1 // DIgR2 // F730004D16R	BC057864	246746	ENSMUSG00000047798	7.95	9.40
Cyp4f18	up	2.71	4.48E-03	chr8(-):74512381-74533527	UCSC	cytochrome P450, fam	1810054N16Rik	AK007863	72054	ENSMUSG00000003484	8.80	10.23
---	up	2.70	9.98E-04	chr8(-):35012639-35013410	UCSC	---	---	AK040416	---	---	6.82	8.25
Gcnt2	up	2.70	3.48E-02	chr13(+):40955137-41056260	UCSC	glucosaminyl (N-acety	5330430K10Rik // IGnT // IGnTA	BC094572	14538	ENSMUSG00000021360	8.64	10.07
9230118H08Rik	up	2.70	2.26E-02	chr11(+):77855875-77856595	UCSC	RIKEN cDNA 923011	---	AK020356	---	---	4.96	6.39
Ier3	up	2.69	7.32E-03	chr17(+):35958628-35959861	UCSC	immediate early respo	cAMPinduciblegene3 // cl-3 // gly	AK051003	15937	ENSMUSG00000003541	9.21	10.63
---	up	2.68	2.55E-02	chr6(+):22065067-22066520	UCSC	---	---	AK051981	---	---	5.69	7.11
Cdk18	up	2.66	1.98E-02	chr1(-):134010127-134036268	UCSC	cyclin-dependent kina	Pctk3	AK004998	18557	ENSMUSG00000026437	7.68	9.09
Fam70a	up	2.65	2.11E-02	chrX(-):35549750-35605617	UCSC	family with sequence s	6430550H21Rik	AK041985	245386	ENSMUSG00000036502	6.19	7.60
Rab3b	up	2.65	3.26E-02	chr4(+):108551675-108615929	UCSC	RAB3B, member RAS	---	AK082959	69908	ENSMUSG00000003411	6.27	7.67
2010005H15Rik	up	2.64	3.28E-02	chr16(+):36221648-36257513	UCSC	RIKEN cDNA 201000	---	BC145264	76770	ENSMUSG00000051949	11.62	13.02
5330421C15Rik	up	2.61	3.01E-02	chr10(+):5317538-5323044	UCSC	RIKEN cDNA 533042	---	AK039175	---	---	7.09	8.47
B230303A05Rik	up	2.61	6.08E-03	chr13(-):15905387-16008490	UCSC	RIKEN cDNA B23030	EG328191	AK045681	---	---	5.91	7.29
---	up	2.61	4.08E-02	chr12(-):86938540-86940124	UCSC	---	---	AK033142	---	---	6.49	7.88
Gp49a	up	2.60	5.96E-03	chr10(+):51200464-51206509	UCSC	glycoprotein 49 A	gp49	AK167751	14727	ENSMUSG00000062593	10.63	12.01
Prok2	up	2.59	1.63E-02	chr6(-):99661293-99676386	UCSC	prokineticin 2	Bombinavariegata8kDaprotein //	AF182066	50501	ENSMUSG00000030069	6.60	7.97
Slpi	up	2.58	3.71E-02	chr2(-):164179807-164182243	UCSC	secretory leukocyte pe	---	BC028509	20568	ENSMUSG00000017002	11.87	13.23
Vamp5	up	2.57	9.58E-03	chr6(-):72318043-72318627	UCSC	vesicle-associated me	Camp	BC145146	53620	ENSMUSG00000073002	5.90	7.26
Pilrb1	up	2.57	4.66E-02	chr5(-):138293375-138299226	UCSC	paired immunoglobin-l	Fdact // Pilrb	AJ400847	170741	ENSMUSG00000066684	7.67	9.03
Plekhg1	up	2.56	2.47E-02	chr10(-):6379246-6606166	UCSC	pleckstrin homology d	D10Ertd733e // mKIAA1209	AK034403	213783	ENSMUSG00000040624	6.70	8.05
9430027J11Rik	up	2.56	1.60E-03	chr14(-):98207555-98209066	UCSC	RIKEN cDNA 943002	---	AK054234	---	---	5.86	7.21
Itgax	up	2.55	1.82E-02	chr7(+):135273060-135294170	UCSC	integrin alpha X	Cd11c // CD11C(p150)alphapoly	AK155816	16411	ENSMUSG00000030789	7.87	9.23
B430306N03Rik	up	2.55	2.44E-02	chr17(+):48454627-48466349	UCSC	RIKEN cDNA B43030	---	AK046672	320148	ENSMUSG00000043740	8.24	9.59
---	up	2.54	1.36E-02	chr6(+):66866397-66870707	UCSC	---	---	AK053250	---	---	7.18	8.53
Tnfaip6	up	2.54	4.75E-02	chr2(+):51893623-51912201	UCSC	tumor necrosis factor	Tnfip6 // TSG-6 // Tsg6	U83903	21930	ENSMUSG00000053475	6.67	8.02
---	up	2.54	6.52E-03	chr11(+):75524275-75524647	UCSC	---	---	AK137857	---	---	4.64	5.98
Lilrb3	up	2.52	4.43E-02	chr7(-):3663011-3671993	UCSC	leukocyte immunoglob	Gp91 // Pirb	AK161081	18733	ENSMUSG00000058818	9.31	10.64
Arap3	up	2.52	4.39E-02	chr18(-):38132282-38158563	UCSC	ArfGAP with RhoGAP	Centd3 // DRAG1 // E030006K04	AF469622	106952	ENSMUSG00000024451	7.73	9.06
Sdc1	up	2.51	1.35E-02	chr12(+):8778160-8799884	UCSC	syndecan 1	CD138 // syn-1 // Synd // Synd1	AK132236	20969	ENSMUSG00000020592	8.77	10.10
L1cam	up	2.50	7.40E-03	chrX(-):71099328-71126136	UCSC	L1 cell adhesion mole	CD171 // L1 // L1-NCAM // NCAM	BC056988	16728	ENSMUSG00000031391	7.69	9.02
Aph1b	up	2.50	1.33E-02	chr9(-):66623016-66643298	UCSC	anterior pharynx defec	2310057K14Rik	AK162585	208117	ENSMUSG00000032375	8.14	9.47
Pycard	up	2.50	2.07E-02	chr7(+):135136804-135140112	UCSC	PYD and CARD doma	9130417A21Rik // Asc // TMS-1	AK050905	66824	ENSMUSG00000030793	6.91	8.23
---	up	2.50	8.54E-03	chr16(-):84974154-84975696	UCSC	---	---	AK079655	---	---	7.62	8.94
Gm10872	up	2.50	3.88E-03	chr15(-):76097239-76100270	UCSC	predicted gene 10872	---	AK155479	---	ENSMUSG00000075583	7.58	8.90
---	up	2.47	3.45E-02	chr9(-):104204258-104207239	UCSC	---	---	AK155854	---	---	8.91	10.21
---	up	2.46	2.00E-02	chr9(+):74836119-74840160	UCSC	---	---	AK149158	---	---	6.58	7.88
Cpne2	up	2.46	4.30E-02	chr8(+):97056928-97094431	UCSC	copine II	3322401K10Rik // MGC:30751 //	BC031801	234577	ENSMUSG00000034361	9.27	10.57
Tnfaip2	up	2.46	2.33E-02	chr12(+):112680869-112693228	UCSC	tumor necrosis factor,	Tnfaip2 // tnfb94 // Tnfip2	AK170719	21928	ENSMUSG00000021281	8.26	9.56
---	up	2.46	1.95E-02	chr12(+):103622378-103624318	UCSC	---	---	AK134104	---	---	7.18	8.48
---	up	2.46	2.41E-02	chr1(+):91644470-91646286	UCSC	---	---	AK158736	---	---	5.62	6.92
6530402F18Rik // Ntng2	up	2.45	9.24E-03	chr2(-):29050314-29108513	UCSC	RIKEN cDNA 653040	2610016D08Rik // Lmnt2	BC145600	171171	0000035513 // ENSMUSG	8.16	9.45
Gm10693	up	2.44	3.16E-02	chr7(-):3812283-3820755	UCSC	predicted pseudogene	---	AK137448	675749	ENSMUSG00000074420	9.30	10.58
Nlrp3	up	2.43	1.16E-03	chr11(+):59355087-59380458	UCSC	NLR family, pyrin dom	Cias1 // cryopyrin // Mmig1 // NAI	AY495377	216799	ENSMUSG00000032691	8.28	9.56
9230118N17Rik	up	2.42	1.62E-02	chr7(+):142758539-142759809	UCSC	RIKEN cDNA 923011	---	AK020358	---	---	5.97	7.24
A730014G21Rik	up	2.42	3.78E-02	chr14(-):98540304-98541878	UCSC	RIKEN cDNA A73001	---	AK042670	---	---	7.40	8.68
Mrgpra2b	up	2.41	4.64E-02	chr7(-):54719177-54784232	UCSC	MAS-related GPR, me	MrgA2 // Mrgpra2	AY042192	235712	ENSMUSG00000054040	10.89	12.16
Bclp1 // Bclp2	up	2.41	9.74E-03	chr3(-):105819869-105835815	UCSC	brain chitinase like pro	---	AB081756	229687	ENSMUSG00000043873	6.47	7.74
Acta2	up	2.40	2.69E-02	chr19(-):34315580-34329826	UCSC	actin, alpha 2, smooth	0610041G09Rik // a-SMA // Actv	AK156331	11475	ENSMUSG00000035783	7.29	8.55
E130106K03Rik	up	2.40	2.92E-03	chr11(+):31800792-31806290	UCSC	RIKEN cDNA E13010	---	AK053536	---	---	6.25	7.51
Pilra	up	2.39	2.31E-02	chr5(-):138263180-138277481	UCSC	paired immunoglobin-l	FDF03	AK041670	231805	ENSMUSG00000046245	10.31	11.56
Olfr1394	up	2.39	2.20E-03	chr11(+):48973515-48974456	UCSC	olfactory receptor 139	GA_x6K02T2QP88-6274566-621	BC127968	258273	ENSMUSG00000048378	7.05	8.30
---	up	2.38	2.70E-03	chr9(-):40170802-40174487	UCSC	---	---	AK036269	---	---	6.07	7.32
---	up	2.37	1.34E-02	chr6(+):117948025-117948132	UCSC	---	---	AK200217	---	---	9.01	10.26
Svil	up	2.37	6.34E-03	chr18(+):4920535-5119289	UCSC	supervillin	B430302E16Rik	AK041925	225115	ENSMUSG00000024236	9.36	10.60
Cacna1h	up	2.37	1.65E-02	chr17(-):25511233-25570729	UCSC	calcium channel, volta	alpha13.2 // Cav3.2 // mKIAA112	AK147242	58226	ENSMUSG00000024112	7.34	8.59
---	up	2.36	4.91E-02	chr5(+):138264512-138277397	UCSC	---	---	AK154887	---	---	7.68	8.92
Selm	up	2.36	2.83E-02	chr11(+):3414686-3417353	UCSC	selenoprotein M	1500040L08Rik // SelM	AK079576	114679	ENSMUSG00000075702	7.61	8.85
Bmx	up	2.35	2.15E-02	chrX(-):160630774-160696126	UCSC	BMX non-receptor tyr	Etk // Etk/Bmx // Tyro8	AK040936	12169	ENSMUSG00000031377	6.06	7.29
Alox5ap	up	2.35	3.73E-02	chr5(+):150076624-150099621	UCSC	arachidonate 5-lipoxy	arachidonate5lipoxygenaseactiva	AK004002	11690	ENSMUSG00000060063	10.71	11.94
Lpcat2	up	2.34	1.68E-02	chr8(+):95379249-95443178	UCSC	lysophosphatidylcholir	Aytl1 // Aytl1a // LPCAT2 // lysoP	AK039431	270084	ENSMUSG00000033192	9.45	10.68
---	up	2.34	6.42E-03	chr2(+):68827438-68831440	UCSC	---	---	AK052110	---	---	7.27	8.50
Dpep2	up	2.33	3.97E-02	chr8(-):108508844-108520323	UCSC	dipeptidase 2	F630103D06Rik // MBD-2	AF488552	319446	ENSMUSG00000053687	8.56	9.78
Tbc1d2	up	2.33	2.96E-02	chr4(-):46617263-46663082	UCSC	TBC1 domain family, l	A630005A06Rik // LOC381605 //	AK148289	381605	ENSMUSG00000039813	7.57	8.79

Supplementary Table S1. List of the 997 Regulated Genes of AML mice treated with ABT-737(Fold-change ≥ 1.5; P-Value ≤ 0.05); 764 upregulated and 233 downregulated genes.

GEO Accession No.: GSE48601

Gene Symbol	Regulation	Fold-Change	P-Value	Gene Coordinates (hg19)	UCSC Link	Gene Name	Aliases and Synonyms	Representative Transcript ID	Entrez Gene ID	EnsEMBL ID	Intensity NRAS-BCL2	Intensity NRAS-BCL2 ABT-737
Nfam1	up	2.33	3.64E-02	chr15(-):82827166-82863797	UCSC	Nfat activating molecu	4921501M20Rik // Nfam1	AK152688	74039	ENSMUSG00000058099	9.00	10.22
Ccdc63	up	2.32	1.56E-02	chr5(-):122558065-122590832	UCSC	coiled-coil domain con	4921511C16Rik	AK029513	330188	ENSMUSG00000043036	6.44	7.65
Ampd3	up	2.31	4.69E-02	chr7(+):117911720-117955917	UCSC	adenosine monophos	---	D85596	11717	ENSMUSG00000005686	8.98	10.19
Fgr	up	2.31	3.75E-02	chr4(+):132530033-132558629	UCSC	Gardner-Rasheed felir	---	AK157640	14191	ENSMUSG00000028874	9.48	10.68
Bmpr1a	up	2.31	4.63E-02	chr14(-):35224255-35315745	UCSC	bone morphogenetic p	1110037I22Rik // ALK3 // Bmpr //	AK132051	12166	ENSMUSG00000021796	6.78	7.99
Pycr1	up	2.31	3.72E-02	chr11(-):120497026-120505014	UCSC	pyrroline-5-carboxylate	MGC:11688	AK139185	209027	ENSMUSG00000025140	7.95	9.16
Pmp22	up	2.31	4.77E-02	chr11(+):62945011-62973048	UCSC	peripheral myelin prot	Gas-3	M32240	18858	ENSMUSG00000018217	6.62	7.83
Plp2	up	2.30	1.06E-02	chrX(-):7245069-7248499	UCSC	proteolipid protein 2	mIMA4	AK012816	18824	ENSMUSG00000031146	8.31	9.51
---	up	2.30	2.56E-02	chr6(-):69176847-69177123	UCSC	---	---	AF139247	---	---	11.14	12.34
---	up	2.30	1.23E-02	chr19(-):5834138-5835942	UCSC	---	---	AK134019	---	---	7.75	8.94
Ccpg1	up	2.29	7.78E-03	chr9(+):72833383-72864145	UCSC	cell cycle progression	1700030B06Rik // 1810073J13R	AK134675	72278	ENSMUSG00000034563	9.19	10.39
Pon3	up	2.29	1.57E-02	chr6(-):5170852-5206253	UCSC	paraoxonase 3	---	AK076090	269823	ENSMUSG00000029759	8.39	9.59
Syne1	up	2.29	2.92E-02	chr10(+):5151834-5325620	UCSC	synaptic nuclear enve	8B // A330049M09Rik // C13003	AF281870	64009	ENSMUSG00000019769	9.91	11.11
Ccrl2	up	2.28	6.22E-04	chr9(-):110956990-110960024	UCSC	chemokine (C-C motif	1810047I05Rik // CCR11 // Cmkl	AK145946	54199	ENSMUSG00000043953	10.02	11.21
6030400A10Rik	up	2.28	1.50E-02	chr5(+):43656396-43657607	UCSC	RIKEN cDNA 603040(	---	AK020045	---	---	6.40	7.59
Oosp1	up	2.28	3.54E-02	chr19(-):11741950-11765546	UCSC	oocyte secreted protei	---	AK033038	170834	ENSMUSG00000041857	8.12	9.31
---	up	2.28	2.17E-02	chr19(+):8094047-8095101	UCSC	---	---	AK161725	---	---	8.29	9.48
Clic5	up	2.28	1.35E-02	chr17(+):44325532-44416455	UCSC	chloride intracellular c	5730531E12Rik	AK156849	224796	ENSMUSG00000023959	6.40	7.59
---	up	2.28	4.00E-02	chr16(-):85136862-85142316	UCSC	---	---	AK050788	---	---	6.10	7.29
---	up	2.27	4.67E-02	chr1(+):185870793-185872680	UCSC	---	---	AK080157	---	---	8.67	9.86
---	up	2.27	4.32E-02	chr11(-):74245972-74247475	UCSC	---	---	AK082577	---	---	7.22	8.40
A630001O12Rik	up	2.26	1.07E-02	chr8(+):129363131-129375733	UCSC	RIKEN cDNA A63000	---	AK172442	---	ENSMUSG00000074025	7.06	8.24
Klra17	up	2.26	1.58E-02	chr6(-):129781168-129826691	UCSC	killer cell lectin-like rec	Ly-49Q // Ly49Q // Ly49q1	AB033769	170733	ENSMUSG00000014543	6.23	7.41
---	up	2.26	4.86E-02	chr5(-):20530334-20531843	UCSC	---	---	AK031795	---	---	6.40	7.57
Cd59a	up	2.26	2.28E-03	chr2(+):103935989-103955506	UCSC	CD59a antigen	Cd59 // protectin	AK002743	12509	ENSMUSG00000032679	7.91	9.09
---	up	2.25	1.11E-02	chr14(-):65034144-65035723	UCSC	---	---	AK043889	---	---	6.36	7.53
---	up	2.24	2.88E-03	chr9(-):66733725-66734763	UCSC	---	---	AK089540	---	---	9.42	10.58
Clec4e	up	2.24	1.23E-02	chr6(-):123231806-123239889	UCSC	C-type lectin domain f	Clecsf9 // Mincle	AK150899	56619	ENSMUSG00000030142	9.78	10.95
---	up	2.24	2.49E-02	chr18(+):4994932-5003074	UCSC	---	---	AK085972	---	---	8.22	9.39
---	up	2.24	4.03E-02	chr12(+):17764748-17767247	UCSC	---	---	AK136551	---	---	6.42	7.58
Rab11fip5	up	2.22	1.69E-02	chr6(-):85284957-85324628	UCSC	RAB11 family interacti	9130206P09Rik // D6Ertd32e // C	AK129230	52055	ENSMUSG00000051343	6.87	8.02
Sepn1	up	2.22	2.37E-02	chr4(-):134093811-134101229	UCSC	selenoprotein N, 1	1110019I12Rik	BC172935	74777	ENSMUSG00000050989	7.56	8.72
---	up	2.22	1.73E-02	chr19(+):53425731-53429499	UCSC	---	---	AK132339	---	---	6.80	7.95
---	up	2.22	3.70E-02	chr18(+):4924116-4926394	UCSC	---	---	AK035407	---	---	8.03	9.18
---	up	2.21	3.82E-02	chr6(-):99428489-99431033	UCSC	---	---	AK032946	---	---	5.70	6.84
---	up	2.21	2.76E-02	chr5(+):43639424-43640996	UCSC	---	---	AK142970	---	---	7.05	8.20
Slc40a1	up	2.21	6.28E-03	chr1(-):45964915-45983364	UCSC	solute carrier family 40	Dusg // ferroportin1 // FPN1 // IR	AK144780	53945	ENSMUSG00000025993	9.06	10.20
---	up	2.20	1.38E-02	chr6(-):70285871-70286121	UCSC	---	---	X65536	---	---	11.07	12.20
Rell1	up	2.20	2.42E-02	chr5(-):64300137-64360136	UCSC	RELT-like 1	---	AK140108	100532	ENSMUSG00000047881	7.86	9.00
Piwil2	up	2.20	3.06E-02	chr14(-):70772285-70828901	UCSC	piwi-like homolog 2 (D	mili // Miwilike	AB032605	57746	ENSMUSG00000033644	6.25	7.39
Agap1	up	2.20	2.86E-02	chr1(+):91351380-91791852	UCSC	ArfGAP with GTPase /	Centg2 // Ggap1 // mKIAA1099	AK147503	347722	ENSMUSG00000055013	7.90	9.04
---	up	2.20	9.74E-03	chr10(-):95226256-95229117	UCSC	---	---	AK158373	---	---	5.73	6.86
---	up	2.19	2.00E-02	chr6(-):99315482-99316577	UCSC	---	---	AK038328	---	---	7.45	8.59
---	up	2.19	3.60E-03	chr19(+):9116598-9117986	UCSC	---	---	AK041788	---	---	7.17	8.30
Pfkfb4	up	2.18	2.60E-02	chr9(+):108893947-108934711	UCSC	6-phosphofructo-2-kin	---	BC057594	270198	ENSMUSG00000025648	8.10	9.22
Gm4132	up	2.18	7.66E-03	chr12(-):117518871-117519462	UCSC	predicted gene 4132	---	AK158567	100042963	---	6.83	7.96
---	up	2.18	4.91E-02	chr11(+):82933597-82934121	UCSC	---	---	AK080205	---	---	6.96	8.08
---	up	2.17	3.50E-02	chr9(-):66755955-66757931	UCSC	---	---	AK149039	---	---	7.98	9.10
Tnfrsf17	up	2.17	3.66E-02	chr16(+):11313902-11320165	UCSC	tumor necrosis factor r	BCM // Tnfrsf13 // Tnfrsf13a	AK020247	21935	ENSMUSG00000022496	7.58	8.70
5330427O13Rik	up	2.17	8.20E-04	chr14(-):64766694-64769704	UCSC	RIKEN cDNA 533042	---	AK036170	---	---	6.41	7.52
Emilin2	up	2.16	3.34E-03	chr17(-):71601513-71660897	UCSC	elastin microfibril inter	basilin // FOAP-10	AK171303	246707	ENSMUSG00000024053	8.89	10.00
---	up	2.16	1.11E-02	chr17(-):18045212-18047231	UCSC	---	---	AK085637	---	---	7.80	8.92
Plau	up	2.15	4.92E-02	chr14(+):21655884-21662610	UCSC	plasminogen activator	u-PA // uPA // urokinase-typeplas	X02389	18792	ENSMUSG00000021822	7.29	8.40
Gabra4	up	2.14	1.98E-02	chr5(-):71960969-72049548	UCSC	gamma-aminobutyric a	Gabra-4	AK141571	14397	ENSMUSG00000029211	6.06	7.16
Fads3	up	2.14	1.50E-02	chr19(+):10116059-10134600	UCSC	fatty acid desaturase 3	---	AK090042	60527	ENSMUSG00000024664	7.47	8.57
Hmox1	up	2.13	9.68E-03	chr8(+):77617516-77624488	UCSC	heme oxygenase (dec	D8Wsu38e // hemeoxygenase1 /	AK159959	15368	ENSMUSG00000005413	9.72	10.81
B3gnt8	up	2.13	4.78E-02	chr7(+):26412657-26414509	UCSC	UDP-GlcNAc:betaGal	B3galt7 // MGC:32391	BC025206	232984	ENSMUSG00000059479	6.70	7.79
---	up	2.13	2.48E-02	chr3(-):75756046-75758223	UCSC	---	---	AK148993	---	---	6.40	7.49
Tcf7l2	up	2.13	3.38E-02	chr19(+):55816310-56007721	UCSC	transcription factor 7-li	mTcf-4B // mTcf-4E // Tcf-4 // Tcf	BC011397	21416	ENSMUSG00000024985	7.80	8.89
Mfsd6	up	2.13	8.72E-03	chr1(-):52714296-52784306	UCSC	major facilitator superf	2210010L05Rik // 9630025I22Rik	AK035995	98682	ENSMUSG00000055802	9.71	10.81
---	up	2.12	4.38E-02	chr8(+):3672429-3672954	UCSC	---	---	AK043010	---	---	6.59	7.68
---	up	2.12	3.70E-02	chr6(-):67892071-67892336	UCSC	---	---	AY731704	---	---	9.81	10.89
Fry	up	2.12	1.18E-03	chr5(+):150921242-151193433	UCSC	furry homolog (Drosop	9330186A19Rik // cg003	AK157981	320365	ENSMUSG00000056602	7.26	8.34
---	up	2.12	3.93E-02	chr2(-):146147191-146148631	UCSC	---	---	AK148925	---	---	6.40	7.49
---	up	2.12	3.05E-02	chr17(+):14034118-14035426	UCSC	---	---	AK047822	---	---	5.94	7.03
Grina	up	2.12	1.06E-03	chr15(+):76077217-76080339	UCSC	glutamate receptor, io	1110025J15Rik	BC019157	66168	ENSMUSG00000022564	11.77	12.86
---	up	2.12	2.00E-02	chr14(+):22119413-22121952	UCSC	---	---	AK037322	---	---	7.84	8.92
Gsr	up	2.11	3.05E-02	chr8(+):34763710-34808633	UCSC	glutathione reductase	D8Ertd238e // Gr-1 // Gr1	BC057325	14782	ENSMUSG00000031584	10.20	11.28
Gpr77	up	2.11	4.29E-02	chr7(-):16819935-16829504	UCSC	G protein-coupled rec	C5L2 // E030029A11Rik	AK053187	319430	ENSMUSG00000074361	8.46	9.54
Slc22a4	up	2.11	2.24E-02	chr11(-):53796629-53841606	UCSC	solute carrier family 22	Octn1	AK143595	30805	ENSMUSG00000020334	7.06	8.14
Pde7b	up	2.10	4.22E-02	chr10(-):20117810-20444885	UCSC	phosphodiesterase 7B	---	AK035385	29863	ENSMUSG00000019990	6.69	7.76
4732465J04Rik	up	2.10	1.29E-02	chr10(+):95208711-95259870	UCSC	RIKEN cDNA 473246	---	AK169506	---	ENSMUSG00000071107	5.99	7.06
Tmem176a	up	2.10	2.19E-02	chr6(+):48791504-48797047	UCSC	transmembrane protei	0610011I04Rik	AK079378	66058	ENSMUSG00000023367	9.80	10.87
Pkd2l2	up	2.10	4.00E-02	chr18(+):34568143-34603772	UCSC	polycystic kidney disea	Polycystin-L2 // TRPP5	AK030120	53871	ENSMUSG00000014503	6.74	7.81
Sema4a	up	2.09	1.13E-02	chr3(-):88239884-88265104	UCSC	sema domain, immuno	Semab // SemB	X85991	20351	ENSMUSG00000028064	9.38	10.44
---	up	2.09	1.77E-02	chr17(+):3486231-3488758	UCSC	---	---	AK078314	---	---	6.77	7.83
Cd9	up	2.08	3.19E-02	chr6(-):125410284-125444778	UCSC	CD9 antigen	Tspan29	AK012793	12527	ENSMUSG00000030342	9.03	10.09
---	up	2.08	2.28E-02	chr6(-):70093584-70094140	UCSC	---	---	M17488	---	---	11.65	12.70
---	up	2.08	9.72E-03	chr1(-):170208825-170210590	UCSC	---	---	AK085303	---	---	6.07	7.12
Cd14	up	2.08	2.81E-02	chr18(-):36884721-36886396	UCSC	CD14 antigen	---	AK149744	12475	ENSMUSG00000051439	9.85	10.90
Gfra2	up	2.08	2.45E-02	chr14(+):71289925-71379645	UCSC	glial cell line derived n	GFRalpha-2 // GFRalpha2	AK154579	14586	ENSMUSG00000022103	8.05	9.11
Dcn	up	2.07	4.27E-02	chr10(+):96942217-96980785	UCSC	decorin	DC // SLRR1B	AK145905	13179	ENSMUSG00000019929	6.59	7.65
---	up	2.07	2.00E-02	chr18(+):5012759-5015499	UCSC	---	---	AK054084	---	---	6.60	7.65
Jup	up	2.07	1.28E-02	chr11(-):100228336-100259089	UCSC	junction plakoglobin	D930025P04Rik // gamma-caten	AK171501	16480	ENSMUSG00000001552	7.94	8.98

Supplementary Table S1. List of the 997 Regulated Genes of AML mice treated with ABT-737(Fold-change ≥ 1.5; P-Value ≤ 0.05); 764 upregulated and 233 downregulated genes.

GEO Accession No.: GSE48601

Gene Symbol	Regulation	Fold-Change	P-Value	Gene Coordinates (hg19)	UCSC Link	Gene Name	Aliases and Synonyms	Representative Transcript ID	Entrez Gene ID	EnsEMBL ID	Intensity NRAS-BCL2	Intensity NRAS-BCL2 ABT-737
Dnase1l1	up	2.06	3.74E-02	chrX(-):71518556-71527672	UCSC	deoxyribonuclease 1-l	2310005K03Rik // Dnase1ll // Dn	BC023246	69537	ENSMUSG00000019088	7.47	8.51
Klf7	up	2.06	2.58E-03	chr1(-):64080059-64168000	UCSC	Kruppel-like factor 7 (u	9830124P08Rik	AF338369	93691	ENSMUSG00000025959	9.01	10.05
F420015M19Rik	up	2.06	1.86E-02	chr17(+):80963368-80965648	UCSC	RIKEN cDNA F420015	---	AK143604	619329	---	9.11	10.15
Lasp1	up	2.06	1.19E-02	chr11(+):97660982-97700078	UCSC	LIM and SH3 protein 1	Def-4 // SH3P6 // Tg(11Col1a1)N	AK154656	16796	ENSMUSG00000038366	10.15	11.19
Ldlr	up	2.05	2.28E-02	chr9(+):21528042-21554360	UCSC	low density lipoprotein	---	AK151968	16835	ENSMUSG00000032193	7.65	8.69
Rbpms	up	2.05	2.26E-02	chr8(-):34893119-35040292	UCSC	RNA binding protein g	2010300K22Rik // 2700019M19F	AK079238	19663	ENSMUSG00000031586	8.12	9.15
2210406H18Rik	up	2.05	5.23E-04	chr7(-):128206366-128207477	UCSC	RIKEN cDNA 221040	---	AK008836	---	---	8.37	9.40
---	up	2.05	3.88E-02	chr6(-):51820227-51822669	UCSC	---	---	AK043556	---	---	8.04	9.07
Ptafr	up	2.05	1.88E-02	chr4(+):132120138-132136774	UCSC	platelet-activating fact	PAFR // PAFreceptor	AK032547	19204	ENSMUSG00000056529	9.71	10.74
1700029J11Rik	up	2.05	2.64E-02	chr2(+):172298046-172299817	UCSC	RIKEN cDNA 170002	---	BC137932	76426	ENSMUSG00000027505	6.99	8.02
---	up	2.05	1.79E-02	chr11(-):88865571-88866327	UCSC	---	---	AK089357	---	---	6.46	7.50
---	up	2.05	6.55E-04	chr11(+):97691483-97694620	UCSC	---	---	AK082834	---	---	6.65	7.68
4833419F23Rik	up	2.04	1.33E-02	chr18(+):4353544-4368918	UCSC	RIKEN cDNA 483341	---	AK014726	---	ENSMUSG00000086803	7.09	8.12
Gm889	up	2.04	1.23E-02	chr12(-):40902080-40926079	UCSC	predicted gene 889	LOC380755	AK134025	380755	ENSMUSG00000071342	6.66	7.69
---	up	2.04	3.39E-02	chr10(-):82050153-82053008	UCSC	---	---	AK140463	---	---	6.90	7.93
Tirap	up	2.03	2.88E-02	chr9(-):34994370-35007878	UCSC	toll-interleukin 1 recep	C130027E04Rik // Mal // MyD88	AK151117	117149	ENSMUSG00000032041	8.55	9.57
4833407H14Rik	up	2.03	4.35E-02	chr19(+):53535111-53537213	UCSC	RIKEN cDNA 483340	---	AK014661	---	---	7.59	8.61
Il10rb	up	2.03	1.88E-02	chr16(+):91408734-91410246	UCSC	interleukin 10 receptor	6620401D04Rik // CRF2-4 // Crft	AK137922	16155	ENSMUSG00000022969	7.08	8.10
Sel1l	up	2.03	1.68E-02	chr12(-):93045060-93087597	UCSC	sel-1 suppressor of lin	Sel1h	AK220502	20338	ENSMUSG00000020964	9.69	10.71
---	up	2.02	6.26E-03	chr1(+):60836196-60838305	UCSC	---	---	AK037422	---	---	7.94	8.95
---	up	2.02	4.44E-02	chr3(-):78958512-78963341	UCSC	---	---	AK046811	---	---	7.29	8.31
Soat2	up	2.02	1.59E-02	chr15(+):101981006-101993889	UCSC	sterol O-acyltransferas	ACAT2 // D15Wsu97e	BC025931	223920	ENSMUSG00000023045	7.46	8.47
Atp6v0a1	up	2.02	4.64E-02	chr11(+):100870794-100925029	UCSC	ATPase, H+ transporti	Atp6n1 // Atp6n1a // V-ATPasea1	AF218249	11975	ENSMUSG00000019302	9.10	10.11
Rab11fip1	up	2.01	1.60E-02	chr8(-):28279312-28281484	UCSC	RAB11 family interacti	2010200K21Rik // 4833414G05R	AK042782	75767	ENSMUSG00000031488	8.38	9.39
---	up	2.01	4.55E-02	chr8(+):119817841-119820313	UCSC	---	---	AK037137	---	---	8.00	9.01
Arsg	up	2.01	1.65E-02	chr11(+):109334686-109434641	UCSC	arylsulfatase G	6330406P08Rik	AK158726	74008	ENSMUSG00000020604	6.70	7.70
Stx11	up	2.00	3.76E-03	chr10(-):12659787-12684040	UCSC	syntaxin 11	5830405C08Rik	AK017897	74732	ENSMUSG00000039232	8.11	9.11
4933416M07Rik	up	2.00	7.82E-03	chr8(+):28253382-28260179	UCSC	RIKEN cDNA 493341	---	AK016835	---	ENSMUSG00000084961	6.50	7.50
---	up	2.00	5.86E-03	chr7(+):75366605-75368165	UCSC	---	---	AK037379	---	---	6.61	7.61
2010310C07Rik	up	2.00	2.87E-02	chr6(+):42320667-42331214	UCSC	RIKEN cDNA 201031	---	AK008560	---	---	6.06	7.06
Gcnt1	up	2.00	1.36E-02	chr19(-):17400633-17447336	UCSC	glucosaminyl (N-acety	5630400D21Rik // 6-N-acetylgluc	D87332	14537	ENSMUSG00000038843	8.23	9.23
---	up	2.00	1.82E-02	chr1(+):185868292-185870661	UCSC	---	---	AK040639	---	---	9.27	10.26
9330160F10Rik	up	2.00	9.28E-03	chr11(-):68871220-68873986	UCSC	RIKEN cDNA 933016	---	AK137386	---	ENSMUSG00000072809	7.36	8.36
---	up	1.99	8.08E-03	chr6(-):70290867-70291174	UCSC	---	---	L09018	---	---	10.83	11.83
Gm6209	up	1.99	4.39E-02	chr3(-):50320321-50411145	UCSC	predicted gene 6209	---	AK138462	621304	---	6.18	7.18
Myo1f	up	1.99	4.16E-02	chr17(+):33692664-33744709	UCSC	myosin IF	C330006B10Rik	BC046502	17916	ENSMUSG00000024300	8.72	9.71
Dgkh	up	1.99	2.55E-02	chr14(-):78969810-79051551	UCSC	diacylglycerol kinase,	5930402B05Rik	AK133314	380921	ENSMUSG00000034731	7.34	8.33
Zfhx3	up	1.98	4.08E-02	chr8(+):111238544-111481839	UCSC	zinc finger homeobox	A230102L03Rik // Atbf1 // WBP9	D26046	11906	ENSMUSG00000038872	7.81	8.80
Ptpre	up	1.98	3.01E-02	chr7(+):142729164-142877976	UCSC	protein tyrosine phosp	PTPe // PTPepsilon // RPTPepsi	U35368	19267	ENSMUSG00000041836	8.95	9.94
---	up	1.98	4.23E-02	chr16(-):85155444-85158481	UCSC	---	---	AK030475	---	---	7.01	8.00
---	up	1.98	4.74E-02	chr14(-):98494855-98500410	UCSC	---	---	AK140944	---	---	5.92	6.90
A530023O14Rik	up	1.97	6.12E-03	chr7(-):111503894-111518399	UCSC	RIKEN cDNA A53002	---	AK080092	244183	ENSMUSG00000052749	6.14	7.12
2310044K18Rik	up	1.97	2.82E-03	chr7(+):90808084-90809473	UCSC	RIKEN cDNA 231004	---	AK009804	---	ENSMUSG00000085080	7.27	8.25
2310016D23Rik	up	1.97	2.17E-02	chr1(+):60835688-60860632	UCSC	RIKEN cDNA 231001	---	AK009383	---	ENSMUSG00000085965	8.58	9.55
Lilrb4	up	1.97	2.48E-03	chr10(+):51210768-51216419	UCSC	leukocyte immunoglob	CD85K // Gp49b // HM18 // ILT3	AK155750	14728	ENSMUSG00000062593	11.53	12.51
---	up	1.97	4.06E-02	chr3(-):50428269-50432334	UCSC	---	---	AK036888	---	---	6.34	7.32
Rnd1	up	1.97	1.87E-02	chr15(-):98493852-98507894	UCSC	Rho family GTPase 1	A830014L09Rik // Arhs	AK039992	223881	ENSMUSG00000054855	7.41	8.39
---	up	1.97	1.30E-02	chr11(-):76600433-76602537	UCSC	---	---	AK035648	---	---	6.84	7.82
Ndufa1	up	1.96	1.13E-02	chrX(-):34727586-34731140	UCSC	NADH dehydrogenase	1810049F12Rik // MWFE	AK007840	54405	ENSMUSG00000016427	6.74	7.71
---	up	1.96	2.98E-02	chr14(-):68541069-68546662	UCSC	---	---	AK137797	---	---	6.18	7.15
4833406M21Rik	up	1.96	4.74E-02	chr13(+):110440121-110441927	UCSC	RIKEN cDNA 483340	---	AK014658	---	---	6.64	7.61
Hrh2	up	1.96	9.16E-03	chr13(+):54287497-54317801	UCSC	histamine receptor H2	---	AK020259	15466	ENSMUSG00000034987	7.32	8.29
---	up	1.95	2.46E-02	chr6(+):149259938-149262913	UCSC	---	---	AK165110	---	---	9.25	10.22
---	up	1.95	3.61E-02	chr10(+):3412317-3413643	UCSC	---	---	AK038189	---	---	8.34	9.30
Kif1b	up	1.95	7.60E-04	chr4(-):148550431-148681844	UCSC	kinesin family member	A530096N05Rik // D4Mil1e // Kif	AB023656	16561	ENSMUSG00000063077	8.17	9.13
---	up	1.95	4.57E-02	chr4(+):31923208-31926070	UCSC	---	---	AK029559	---	---	7.54	8.51
---	up	1.95	6.34E-03	chr3(-):107535977-107540869	UCSC	---	---	AK076420	---	---	5.49	6.46
---	up	1.95	4.74E-02	chr2(-):60690035-60692497	UCSC	---	---	AK028585	---	---	5.86	6.82
Cdc42ep2	up	1.95	2.31E-02	chr19(-):5916128-5924817	UCSC	CDC42 effector protein	1110008C05Rik // Borg1 // Cep2	AK083004	104252	ENSMUSG00000045664	8.01	8.97
D030074K08Rik	up	1.95	2.73E-02	chr15(-):93118326-93122130	UCSC	RIKEN cDNA D03007	---	AK083749	---	---	7.21	8.17
---	up	1.95	8.66E-03	chr11(-):80581699-80585486	UCSC	---	---	AK085124	---	---	6.49	7.46
---	up	1.95	2.64E-02	chr11(-):46181573-46188485	UCSC	---	---	AK138049	---	---	8.30	9.26
Mgll	up	1.94	3.16E-02	chr6(+):88674425-88778351	UCSC	monoglyceride lipase	Magl	AJ001118	23945	ENSMUSG00000033174	7.19	8.15
---	up	1.94	3.25E-02	chr19(-):5920971-5923294	UCSC	---	---	AK048173	---	---	6.24	7.19
---	up	1.93	2.10E-02	chr10(+):3435489-3441640	UCSC	---	---	AK137924	---	---	7.19	8.15
---	up	1.93	5.22E-03	chr1(-):132982829-132988726	UCSC	---	---	AK142966	---	---	8.14	9.09
Spry4	up	1.93	4.54E-02	chr18(-):38745926-38761073	UCSC	sprouty homolog 4 (D	A030006O18Rik // sprouty4	BC057005	24066	ENSMUSG00000024427	7.25	8.20
Litaf	up	1.93	3.31E-02	chr16(-):10958952-10993216	UCSC	LPS-induced TN facto	3222402J11Rik // N4WBP3 // Ne	AK078708	56722	ENSMUSG00000022500	10.95	11.90
Tmem63a	up	1.93	3.24E-02	chr1(+):182872596-182905234	UCSC	transmembrane protei	MGC:11687 // MGC:25803	AK144899	208795	ENSMUSG00000026519	9.79	10.74
Syne2	up	1.93	4.86E-02	chr12(+):76919304-77024005	UCSC	synaptic nuclear envel	6820443O06Rik // D12Ertd777e	AK145252	319565	ENSMUSG00000063450	6.95	7.90
Nudt4	up	1.93	4.57E-02	chr10(-):95009922-95026782	UCSC	nudix (nucleoside diph	4933436C10Rik // DIPP2 // DIPP	AK048062	71207	ENSMUSG00000020029	9.87	10.82
Mxd1	up	1.92	3.16E-02	chr6(-):86598976-86619153	UCSC	MAX dimerization prot	Mad // Mad1	AK151305	17119	ENSMUSG00000001156	10.23	11.17
---	up	1.92	1.49E-02	chr6(-):68718544-68718840	UCSC	---	---	X59097	---	---	11.30	12.24
B230312A22Rik	up	1.92	2.20E-02	chr4(-):43045288-43059092	UCSC	RIKEN cDNA B23031	---	BC054736	230088	ENSMUSG00000036002	8.38	9.32
---	up	1.92	4.55E-02	chr2(+):26448608-26459731	UCSC	---	---	BC054063	---	---	6.73	7.67
Neat1	up	1.92	8.36E-03	chr19(+):5843698-5845217	UCSC	nuclear paraspeckle a	2310043N10Rik	AK210060	66961	---	6.96	7.90
---	up	1.92	4.70E-03	chr14(+):75591945-75593010	UCSC	---	---	AK142448	---	---	8.02	8.96
Arhgap23	up	1.92	2.53E-02	chr11(+):97312833-97363714	UCSC	Rho GTPase activatin	---	BC156993	58996	ENSMUSG00000049807	7.56	8.51
Cib2	up	1.91	2.65E-02	chr9(-):54392603-54407995	UCSC	calcium and integrin b	2810434I23Rik // calciumbinding	AK013240	56506	ENSMUSG00000037493	7.16	8.09
---	up	1.91	6.38E-03	chr7(-):135858117-135858753	UCSC	---	---	AK040036	---	---	6.36	7.29
Pde2a	up	1.91	2.40E-02	chr7(+):108570223-108661340	UCSC	phosphodiesterase 2A	---	BC086800	207728	ENSMUSG00000030653	9.88	10.81
---	up	1.91	1.26E-02	chr6(-):69714518-69714803	UCSC	---	---	U29621	---	---	11.94	12.87
Zyx	up	1.91	9.12E-03	chr6(+):42299825-42310145	UCSC	zyxin	R75157	AK035743	22793	ENSMUSG00000029860	10.21	11.15
Fndc3b	up	1.91	2.06E-02	chr3(-):27315078-27610230	UCSC	fibronectin type III don	1600019O04Rik // fad104	AK220297	72007	ENSMUSG00000039286	8.84	9.77

Supplementary Table S1. List of the 997 Regulated Genes of AML mice treated with ABT-737(Fold-change ≥ 1.5; P-Value ≤ 0.05); 764 upregulated and 233 downregulated genes.

GEO Accession No.: GSE48601

Gene Symbol	Regulation	Fold-Change	P-Value	Gene Coordinates (hg19)	UCSC Link	Gene Name	Aliases and Synonyms	Representative Transcript ID	Entrez Gene ID	EnsEMBL ID	Intensity NRAS-BCL2	Intensity NRAS-BCL2 ABT-737
Gm13710	up	1.91	4.50E-02	chr2(-):84340905-84347031	UCSC	predicted gene 13710	---	AK044106	672763	ENSMUSG00000087362	7.59	8.52
---	up	1.91	3.40E-02	chr18(+):46930978-46932725	UCSC	---	---	AK052104	---	---	6.78	7.72
---	up	1.91	1.54E-02	chr18(+):5005688-5008692	UCSC	---	---	AK084185	---	---	6.63	7.56
Fer	up	1.91	2.16E-03	chr17(+):64213329-64488843	UCSC	fer (fms/fps related) pr	C330004K01Rik // Fert // Fert2	BC058100	14158	ENSMUSG00000000127	6.25	7.18
Gm14636	up	1.90	2.86E-03	chrX(-):18734107-18744370	UCSC	predicted gene 14636	ENSMUSG00000073274	AK170409	---	ENSMUSG00000073274	6.40	7.33
Snapc5	up	1.90	3.41E-02	chr9(+):64028346-64030490	UCSC	small nuclear RNA act	2010103A03Rik	AK007634	330959	ENSMUSG00000032398	6.84	7.77
---	up	1.90	4.26E-02	chr7(-):135556777-135560834	UCSC	---	---	AK137948	---	---	6.50	7.43
---	up	1.90	2.56E-02	chr7(-):117943947-117944975	UCSC	---	---	BC051516	---	---	7.47	8.40
Ecm1	up	1.90	9.24E-03	chr3(-):95538071-95543494	UCSC	extracellular matrix pr	p85	AK169939	13601	ENSMUSG00000028108	8.43	9.36
---	up	1.90	4.78E-02	chr14(-):78959157-78962636	UCSC	---	---	AK047588	---	---	6.37	7.30
C630004H02Rik	up	1.90	2.14E-02	chr11(-):115209021-115229040	UCSC	RIKEN cDNA C63000	---	AK138882	217310	ENSMUSG00000034586	7.61	8.54
---	up	1.89	4.97E-02	chrX(+):23320539-23322321	UCSC	---	---	AK155735	---	---	6.48	7.40
Rab11fip1	up	1.89	2.06E-03	chr8(-):28249770-28285119	UCSC	RAB11 family interacti	2010200K21Rik // 4833414G05R	AK030769	75767	ENSMUSG00000031488	8.63	9.56
Rab20	up	1.89	1.48E-02	chr8(-):11453392-11478716	UCSC	RAB20, member RAS	D8Ertd350e	AK163743	19332	ENSMUSG00000031504	7.82	8.74
Atp1a3	up	1.89	3.24E-02	chr7(-):25763190-25790956	UCSC	ATPase, Na+/K+ trans	Atpa-2 // MGC:27631 // MGC:38	BC020177	232975	ENSMUSG00000040907	9.14	10.05
Itgb2	up	1.89	2.33E-02	chr10(+):76993092-77028453	UCSC	integrin beta 2	2E6 // Cd18 // Mac-1beta	AK161236	16414	ENSMUSG00000000290	10.88	11.80
---	up	1.89	2.47E-02	chr2(+):117248514-117252234	UCSC	---	---	AK137791	---	---	5.86	6.77
2810455B08Rik	up	1.89	4.45E-02	chr16(-):31173760-31174971	UCSC	RIKEN cDNA 2810455	---	AK013351	---	---	8.29	9.21
---	up	1.89	1.83E-02	chr15(+):74837732-74854840	UCSC	---	---	AK085263	---	---	6.50	7.42
AV320309	up	1.89	2.81E-02	chr12(-):85206142-85207301	UCSC	expressed sequence A	---	AK142013	---	---	7.80	8.71
Gm10456	up	1.88	4.03E-02	chrX(+):99246187-99267307	UCSC	predicted gene 10456	---	AK158124	---	ENSMUSG00000073037	7.04	7.95
Gm10382	up	1.88	2.77E-02	chr5(+):125869691-125870924	UCSC	predicted gene 10382	EG639281	AK132914	---	ENSMUSG00000072612	6.96	7.88
---	up	1.88	4.44E-02	chr5(+):121835531-121837110	UCSC	---	---	AK132740	---	---	5.84	6.76
---	up	1.88	3.15E-02	chr4(+):18024764-18027497	UCSC	---	---	AK034862	---	---	5.87	6.78
Fam63a	up	1.88	4.36E-02	chr3(+):95085766-95100099	UCSC	family with sequence s	1810005H09Rik // 4930504E06R	AK169673	75007	ENSMUSG00000078645	8.23	9.14
---	up	1.88	1.16E-03	chr2(+):68851669-68852536	UCSC	---	---	AK078426	---	---	6.71	7.62
---	up	1.88	1.30E-02	chr19(-):24614754-24619308	UCSC	---	---	AK143465	---	---	6.91	7.82
---	up	1.88	4.12E-03	chr12(-):32685769-32689892	UCSC	---	---	AK142349	---	---	5.96	6.87
Cd68	up	1.88	3.44E-02	chr11(-):69477715-69479655	UCSC	CD68 antigen	gp110 // macrosialin // Scard1	X68273	12514	ENSMUSG00000018774	10.47	11.38
---	up	1.88	2.05E-02	chr1(+):66858889-66861069	UCSC	---	---	AK087152	---	---	6.07	6.98
---	up	1.87	1.88E-03	chr8(+):63502830-63504067	UCSC	---	---	AK142998	---	---	5.23	6.14
---	up	1.87	3.07E-02	chr7(-):81536525-81538036	UCSC	---	---	AK048580	---	---	7.67	8.58
Megf9	up	1.87	6.78E-03	chr4(+):70091925-70095432	UCSC	multiple EGF-like-dom	4933405H16Rik // Egfl5 // mKIAA	AK155926	230316	ENSMUSG00000039270	6.35	7.25
---	up	1.87	2.10E-02	chr19(+):55847320-55849810	UCSC	---	---	AK084192	---	---	6.08	6.99
Map3k9	up	1.87	2.47E-02	chr12(-):82822576-82882162	UCSC	mitogen-activated prot	E130314H24Rik // Mlk1	AK155677	338372	ENSMUSG00000042724	7.03	7.93
Abcc3	up	1.87	4.06E-03	chr11(-):94204610-94254311	UCSC	ATP-binding cassette,	1700019L09Rik // MRP3	AK172420	76408	ENSMUSG00000020865	8.03	8.93
Olfr373	up	1.86	1.88E-03	chr8(+):74623661-74624605	UCSC	olfactory receptor 373	GA_x6K02T2NUPS-231686-232	BC119445	258532	ENSMUSG00000061561	6.20	7.10
---	up	1.86	2.81E-02	chr7(+):124814078-124817091	UCSC	---	---	AK028406	---	---	7.44	8.34
---	up	1.86	2.14E-02	chr7(+):90781881-90784327	UCSC	---	---	AK085487	---	---	7.78	8.67
Tlr6	up	1.86	3.07E-02	chr5(-):65344339-65351288	UCSC	toll-like receptor 6	---	AK154253	21899	ENSMUSG00000051498	9.15	10.05
---	up	1.86	1.43E-02	chr2(-):60631115-60633239	UCSC	---	---	AK037924	---	---	6.51	7.41
---	up	1.86	8.12E-03	chr16(-):90984152-90987482	UCSC	---	---	AK044844	---	---	8.48	9.38
---	up	1.85	4.43E-02	chrX(+):126884289-126886828	UCSC	---	---	AK053195	---	---	5.70	6.58
---	up	1.85	1.97E-02	chr8(+):56090638-56093135	UCSC	---	---	AK043213	---	---	6.32	7.20
Adrb2	up	1.85	1.51E-02	chr18(-):62337471-62339635	UCSC	adrenergic receptor, b	Adrb-2 // Badm // beta2-adrenoc	AK080276	11555	ENSMUSG00000045730	9.48	10.37
Socs3	up	1.85	1.18E-03	chr11(-):117827403-117830501	UCSC	suppressor of cytokine	CIS3 // Cish3 // cytokine-inducibl	AK139241	12702	ENSMUSG00000053113	9.05	9.94
---	up	1.84	6.04E-03	chr10(-):9523316-9526424	UCSC	---	---	AK084897	---	---	8.20	9.08
---	up	1.84	2.52E-02	chr2(-):178239492-178240517	UCSC	---	---	AK155005	---	---	6.48	7.36
---	up	1.84	3.59E-02	chr17(-):46869636-46870217	UCSC	---	---	AK087286	---	---	6.36	7.24
Lrrc6	up	1.84	1.56E-02	chr15(-):66211421-66332456	UCSC	leucine rich repeat cor	LRTP	BC046277	54562	ENSMUSG00000022375	6.38	7.26
---	up	1.84	4.09E-02	chr15(-):53156578-53160207	UCSC	---	---	AK035801	---	---	8.09	8.97
---	up	1.83	2.52E-02	chr6(-):86613182-86615545	UCSC	---	---	AK157959	---	---	8.64	9.51
Hspa4l	up	1.83	1.78E-02	chr3(+):40549302-40595803	UCSC	heat shock protein 4 li	94kDa // APG-1 // Osp94	BC110662	18415	ENSMUSG00000025757	6.31	7.18
---	up	1.83	8.80E-03	chr3(+):27978112-27981430	UCSC	---	---	AK086672	---	---	6.22	7.09
Qsox1	up	1.83	4.42E-02	chr1(-):157625289-157659983	UCSC	quiescin Q6 sulfhydryl	1300003H02Rik // Qscn6	BC076590	104009	ENSMUSG00000033684	9.06	9.93
---	up	1.83	1.80E-02	chr11(+):120495080-120496439	UCSC	---	---	AK163532	---	---	7.24	8.11
---	up	1.82	4.77E-04	chr9(+):100995190-100996802	UCSC	---	---	AK051940	---	---	6.75	7.62
---	up	1.82	1.32E-02	chr5(-):138642904-138644726	UCSC	---	---	AK080008	---	---	7.10	7.97
---	up	1.82	4.13E-02	chr4(-):31245110-31246804	UCSC	---	---	AK157471	---	---	7.11	7.98
Fhl3	up	1.82	4.37E-02	chr4(+):124377979-124385314	UCSC	four and a half LIM do	---	BC145939	14201	ENSMUSG00000032643	8.77	9.63
BC027582	up	1.82	3.69E-02	chr3(-):103535603-103536476	UCSC	cDNA sequence BC02	---	BC027582	---	---	6.20	7.06
---	up	1.82	4.95E-02	chr18(+):46924868-46929762	UCSC	---	---	AK088507	---	---	7.43	8.29
---	up	1.82	1.20E-02	chr15(-):51714272-51715375	UCSC	---	---	AK089171	---	---	7.43	8.30
A730061H03Rik	up	1.82	4.16E-02	chr14(-):56177937-56179245	UCSC	RIKEN cDNA A73006	---	AK049078	---	ENSMUSG00000053588	6.83	7.69
---	up	1.81	3.92E-02	chr10(+):127543367-127543909	UCSC	---	---	AK021046	---	---	6.31	7.17
Rhobtb1	up	1.81	4.25E-02	chr10(+):68671300-68752730	UCSC	Rho-related BTB dom	1700008H16Rik // 3110048G13R	AK005770	69288	ENSMUSG00000019944	7.78	8.64
Ipcef1	up	1.81	6.28E-03	chr10(+):3366075-3460176	UCSC	interaction protein for	A130090K04Rik	AK220339	320495	ENSMUSG00000064065	8.87	9.73
---	up	1.81	2.29E-02	chr2(-):128137420-128141735	UCSC	---	---	AK157535	---	---	6.37	7.22
Snai1	up	1.81	4.82E-02	chr2(+):167363702-167368314	UCSC	snail homolog 1 (Dros	Sna // Sna1 // Snail // Snail1	AK144478	20613	ENSMUSG00000042821	7.43	8.28
---	up	1.81	4.31E-02	chr17(-):29569255-29572403	UCSC	---	---	AK153778	---	---	6.65	7.51
---	up	1.81	4.61E-02	chr15(-):64055063-64059359	UCSC	---	---	AK141775	---	---	6.96	7.82
Rnasel	up	1.81	1.56E-02	chr1(+):155596555-155611347	UCSC	ribonuclease L (2', 5'-c	2-5A-dependentRNAase // E230	AK140815	24014	ENSMUSG00000066800	8.16	9.02
---	up	1.80	3.68E-02	chr6(+):128596513-128597117	UCSC	---	---	AK187487	---	---	10.43	11.28
---	up	1.80	4.03E-02	chr10(+):38688347-38691639	UCSC	---	---	AK148977	---	---	5.17	6.02
Agpat9	up	1.80	2.78E-02	chr5(+):101275149-101328120	UCSC	1-acylglycerol-3-phosp	4933407I02Rik // A230097K15R	BC096769	231510	ENSMUSG00000029314	6.91	7.75
Csf1	up	1.80	2.24E-02	chr3(-):107543975-107563388	UCSC	colony stimulating fact	colony-stimulatingfactor-1 // CSF	AK154261	12977	ENSMUSG00000014599	8.42	9.26
Sepx1	up	1.80	3.36E-02	chr17(+):24873587-24879723	UCSC	selenoprotein X 1	D17Wsu82e // MsrB1 // SelR // S	BC090646	27361	ENSMUSG00000075705	11.05	11.90
Carhsp1	up	1.80	1.77E-02	chr16(-):8658674-8672250	UCSC	calcium regulated hea	1200011K09Rik // D16Ertd465e	AK149875	52502	ENSMUSG00000008393	8.07	8.92
---	up	1.80	3.76E-02	chr12(-):81349138-81352248	UCSC	---	---	AK054447	---	---	6.08	6.93
Cdc42ep4	up	1.80	1.21E-02	chr11(-):113588164-113613130	UCSC	CDC42 effector protei	1500041M20Rik // Borg4 // CEP4	AK075739	56699	ENSMUSG00000041598	7.46	8.31
Coro2b	up	1.79	4.09E-02	chr9(-):62267301-62384852	UCSC	coronin, actin binding	E130012P22Rik	AK087414	235431	ENSMUSG00000041729	7.32	8.17
---	up	1.79	7.24E-03	chr8(+):113498050-113498989	UCSC	---	---	AK031976	---	---	5.67	6.52
Ggt5	up	1.79	1.04E-02	chr10(+):75052085-75079945	UCSC	gamma-glutamyltrans	gamma-glutamylleukotrienase //	AK049084	23887	ENSMUSG00000006344	7.52	8.35
1110007C09Rik	up	1.79	2.40E-02	chr13(-):49298320-49311396	UCSC	RIKEN cDNA 111000	---	AK003526	68480	ENSMUSG00000037960	8.80	9.64

Supplementary Table S1. List of the 997 Regulated Genes of AML mice treated with ABT-737(Fold-change ≥ 1.5; P-Value ≤ 0.05); 764 upregulated and 233 downregulated genes.

GEO Accession No.: GSE48601

Gene Symbol	Regulation	Fold-Change	P-Value	Gene Coordinates (hg19)	UCSC Link	Gene Name	Aliases and Synonyms	Representative Transcript ID	Entrez Gene ID	EnsEMBL ID	Intensity NRAS-BCL2	Intensity NRAS-BCL2 ABT-737
---	up	1.79	4.07E-02	chr12(-):82818818-82821039	UCSC	---	---	BC036387	---	---	8.90	9.73
2510042O18Rik	up	1.79	2.28E-02	chr10(-):58979548-58980426	UCSC	RIKEN cDNA 251004	---	AK011095	---	---	7.64	8.48
Cpeb2	up	1.78	3.15E-02	chr5(+):43625165-43680960	UCSC	cytoplasmic polyaden	A630055H10Rik	AK042065	231207	ENSMUSG00000039782	8.50	9.33
Man1c1	up	1.78	4.61E-02	chr4(-):134117605-134260205	UCSC	mannosidase, alpha, c	---	BC067023	230815	ENSMUSG00000037306	9.16	9.99
Ar	up	1.77	1.62E-02	chrX(+):95345001-95513456	UCSC	androgen receptor	---	AK133647	11835	ENSMUSG00000046532	6.72	7.54
Ppp1r3b	up	1.77	2.90E-02	chr8(+):36438784-36451178	UCSC	protein phosphatase 1	GL	BC079666	244416	ENSMUSG00000046794	7.16	7.99
Dmwd	up	1.77	8.82E-03	chr7(+):19661909-19668125	UCSC	dystrophia myotonica-	59 // Dm9 // DMR-N9	S60312	13401	ENSMUSG00000030410	7.68	8.50
4632428N05Rik	up	1.77	4.51E-02	chr10(+):59809651-59893042	UCSC	RIKEN cDNA 463242	---	AK162635	74048	ENSMUSG00000020101	10.95	11.78
Sfxn5	up	1.77	1.57E-02	chr6(-):85163048-85283415	UCSC	sideroflexin 5	C230001H08Rik	AK082073	94282	ENSMUSG00000033720	8.11	8.93
Gm12703	up	1.77	1.35E-02	chr4(-):94696654-94715063	UCSC	predicted gene 12703	---	AK086407	100039265	ENSMUSG00000052767	7.06	7.88
---	up	1.77	2.74E-02	chr3(+):89897073-89898942	UCSC	---	---	AK040628	---	---	8.67	9.49
---	up	1.77	4.14E-02	chr2(+):13335759-13337900	UCSC	---	---	AK154824	---	---	6.56	7.38
Pdlim7	up	1.77	1.34E-02	chr13(-):55597156-55614799	UCSC	PDZ and LIM domain	1110003B01Rik // 2410002J21R	AK033091	67399	ENSMUSG00000021493	8.35	9.17
Ccl4	up	1.77	2.69E-02	chr11(+):83476087-83478182	UCSC	chemokine (C-C motif	Act-2 // AT744.1 // MIP-1B // MIP	M23503	20303	ENSMUSG00000018930	7.16	7.99
Gm7256	up	1.77	4.72E-02	chr1(+):30929515-30930320	UCSC	predicted gene 7256	---	BC028811	638995	---	5.95	6.77
B930049P21Rik	up	1.76	3.41E-02	chr6(-):99472447-99474162	UCSC	RIKEN cDNA B93004	---	AK047332	---	---	7.51	8.33
Dab2ip	up	1.76	1.26E-02	chr2(+):35414093-35586514	UCSC	disabled homolog 2 (D	2310011D08Rik // mKIAA1743	DQ473307	69601	ENSMUSG00000026883	7.71	8.53
---	up	1.76	2.94E-02	chr17(-):80591212-80593493	UCSC	---	---	AK046325	---	---	5.65	6.47
Anxa11	up	1.76	1.46E-02	chr14(+):26661656-26706290	UCSC	annexin A11	A830099O17Rik // Anx11	U65986	11744	ENSMUSG00000021866	10.12	10.94
---	up	1.76	4.14E-02	chr14(+):26667996-26669480	UCSC	---	---	AK082026	---	---	5.94	6.76
Rap1gap2	up	1.76	4.04E-02	chr11(-):74196986-74424419	UCSC	RAP1 GTPase activat	Garnl4 // LOC380710 // mKIAA1	AK147290	380711	ENSMUSG00000038807	8.50	9.31
Nbeal2	up	1.75	1.03E-02	chr9(-):110527376-110556646	UCSC	neurobeachin-like 2	1110014F23Rik // mKIAA0540	BC172118	235627	ENSMUSG00000056724	9.03	9.84
---	up	1.75	2.66E-02	chr9(+):72904556-72906495	UCSC	---	---	AK035248	---	---	6.88	7.68
---	up	1.75	4.44E-02	chr7(+):75218326-75220020	UCSC	---	---	AK138254	---	---	6.59	7.40
---	up	1.75	4.03E-02	chr6(-):70166849-70167156	UCSC	---	---	X75398	---	---	11.09	11.90
---	up	1.75	1.93E-02	chr5(-):67783389-67785597	UCSC	---	---	AK052318	---	---	7.08	7.89
Fry	up	1.75	1.78E-02	chr5(+):151212185-151216263	UCSC	furry homolog (Drosop	9330186A19Rik // cg003	AK035256	320365	ENSMUSG00000056602	6.47	7.28
Rgs3	up	1.75	1.13E-02	chr4(+):62220881-62365035	UCSC	regulator of G-protein	4930506N09Rik // C2pa // C2PA	AJ250999	50780	ENSMUSG00000059810	9.27	10.08
Mocs1	up	1.75	3.99E-02	chr17(+):49567687-49594754	UCSC	molybdenum cofactor	3110045D15Rik	AK157231	56738	ENSMUSG00000064120	9.18	9.99
---	up	1.75	1.94E-02	chr16(-):5027866-5028477	UCSC	---	---	AK049088	---	---	7.19	8.00
---	up	1.75	1.27E-02	chr12(-):85156282-85160896	UCSC	---	---	AK142124	---	---	7.86	8.66
---	up	1.74	4.95E-02	chr6(-):99334601-99338493	UCSC	---	---	AK042037	---	---	7.11	7.92
Igk-V21-2 // Igk-V21-4	up	1.74	2.51E-02	chr6(+):70165394-70676751	UCSC	immunoglobulin kappa	V(kappa)21A	X05877	626347 // 626583	0000076600 // ENSMUSG	12.38	13.18
Igj	up	1.74	5.89E-03	chr5(-):88949540-88956874	UCSC	immunoglobulin joinin	9530090F24Rik // Jch // Jchain	AK078865	16069	ENSMUSG00000067149	11.94	12.74
---	up	1.74	4.45E-02	chr5(-):65481954-65482865	UCSC	---	---	AK050605	---	---	7.20	8.00
---	up	1.74	3.37E-02	chr5(+):122858499-122861083	UCSC	---	---	AK049964	---	---	7.12	7.92
---	up	1.74	2.19E-04	chr3(-):142042563-142044813	UCSC	---	---	AK053697	---	---	8.91	9.70
---	up	1.74	3.63E-02	chr17(+):66364818-66367514	UCSC	---	---	AK143128	---	---	8.55	9.35
C030046I01Rik	up	1.74	3.78E-02	chr10(-):79372798-79379751	UCSC	RIKEN cDNA C03004	---	AK088107	109284	ENSMUSG00000035781	10.29	11.09
Gm11123	up	1.73	3.88E-02	chrX(+):103255564-103257555	UCSC	predicted gene 11123	---	AK157679	---	ENSMUSG00000079474	7.12	7.91
---	up	1.73	9.70E-03	chr10(-):12672100-12675887	UCSC	---	---	AK037271	---	---	7.68	8.47
Ggt1	up	1.73	3.14E-02	chr10(+):75031407-75048935	UCSC	gamma-glutamyltrans	CD224 // dwg // GGT // Ggtp	AK079235	14598	ENSMUSG00000006345	7.79	8.58
---	up	1.73	4.90E-02	chr7(+):56849811-56862514	UCSC	---	---	BC026601	---	---	8.23	9.02
---	up	1.73	5.54E-03	chr6(-):70067072-70067359	UCSC	---	---	U29575	---	---	10.99	11.78
2900056B19Rik	up	1.73	1.16E-02	chr5(-):103154151-103154852	UCSC	RIKEN cDNA 290005	---	AK013703	---	---	6.17	6.96
Rbm47	up	1.73	3.59E-02	chr5(-):66409848-66543147	UCSC	RNA binding motif pro	9530077J19Rik // MGC:18900	AK170082	245945	ENSMUSG00000070780	7.94	8.73
Lrrc8d	up	1.73	8.74E-03	chr5(+):106128987-106244226	UCSC	leucine rich repeat cor	2810473G09Rik // 4930525N13F	AK137459	231549	ENSMUSG00000046079	8.69	9.48
---	up	1.73	4.99E-02	chr2(+):120427579-120428785	UCSC	---	---	AK149564	---	---	8.72	9.52
---	up	1.73	3.05E-02	chr2(+):48975855-48978283	UCSC	---	---	AK034737	---	---	6.92	7.71
Pygm	up	1.73	4.45E-02	chr19(+):6384429-6398458	UCSC	muscle glycogen phos	---	AF124787	19309	ENSMUSG00000032648	7.46	8.25
Lyst	up	1.73	1.47E-02	chr13(+):13682661-13871067	UCSC	lysosomal trafficking r	D13Sfk13	U70015	17101	ENSMUSG00000019726	9.82	10.61
---	up	1.73	4.70E-03	chr12(+):112398557-112401305	UCSC	---	---	AK089901	---	---	7.23	8.02
E030047P09Rik	up	1.73	4.77E-02	chr12(+):103602678-103605338	UCSC	RIKEN cDNA E03004	---	AK156527	---	---	7.73	8.52
---	up	1.72	3.50E-02	chr8(+):117346549-117351689	UCSC	---	---	AK079493	---	---	7.01	7.79
Ctsd	up	1.72	2.16E-02	chr7(-):149561816-149573806	UCSC	cathepsin D	CatD // CD	AK093885	13033	ENSMUSG00000007891	11.12	11.91
Xylt1	up	1.72	1.63E-04	chr7(+):124524492-124811142	UCSC	xylosyltransferase 1	---	BC157033	233781	ENSMUSG00000030657	9.81	10.60
Camk2n1	up	1.72	2.82E-02	chr4(+):138011101-138014058	UCSC	calcium/calmodulin-de	1810006K23Rik // CaMKIINalpha	AY523601	66259	ENSMUSG00000046447	5.86	6.64
Slc2a6	up	1.72	3.43E-02	chr2(-):26876885-26883511	UCSC	solute carrier family 2	F630103L12Rik // Glut6	AK089246	227659	ENSMUSG00000036067	8.71	9.49
8030443L12Rik	up	1.72	6.76E-03	chr1(-):132980851-132981313	UCSC	RIKEN cDNA 803044	---	AK020200	---	---	8.22	9.00
Gm10345	up	1.72	4.98E-02	chr15(+):76124864-76127325	UCSC	predicted gene 10345	1700010G02Rik	GU144514	100041269	ENSMUSG00000071724	7.97	8.75
---	up	1.72	3.02E-02	chr11(-):29903130-29904519	UCSC	---	---	AK053026	---	---	6.47	7.25
---	up	1.71	2.67E-02	chr9(+):59728324-59729885	UCSC	---	---	AK142353	---	---	6.80	7.57
Pafah1b3	up	1.71	3.10E-02	chr7(-):26080066-26082974	UCSC	platelet-activating fact	mus[g] // Pafahg	U57746	18476	ENSMUSG00000005447	9.48	10.25
---	up	1.71	1.34E-02	chr10(+):57820114-57824772	UCSC	---	---	AK141104	---	---	7.99	8.77
---	up	1.71	4.37E-02	chr6(-):69676567-69676837	UCSC	---	---	X70264	---	---	12.34	13.12
---	up	1.71	2.27E-02	chr6(+):68469185-68469441	UCSC	---	---	U29593	---	---	10.76	11.53
---	up	1.71	1.12E-02	chr2(+):68729441-68733029	UCSC	---	---	AK083008	---	---	6.12	6.90
Tsga10	up	1.71	4.84E-02	chr1(-):37811621-37922145	UCSC	testis specific 10	4933432N21Rik // Mtsga10	BC066782	211484	ENSMUSG00000060771	6.81	7.58
B930069K15Rik	up	1.71	4.27E-02	chr11(+):105996132-105999643	UCSC	RIKEN cDNA B93006	---	AK081024	---	---	7.86	8.63
9430098F02Rik	up	1.71	2.65E-02	chr11(+):51938032-51941281	UCSC	RIKEN cDNA 943009	---	AK035193	---	---	8.34	9.12
---	up	1.70	3.69E-02	chrX(+):126544447-126546092	UCSC	---	---	AK047731	---	---	8.91	9.67
Aph1c	up	1.70	1.86E-02	chr9(-):66662817-66682528	UCSC	anterior pharynx defec	0610008A10Rik	BC063254	68318	ENSMUSG00000053040	8.00	8.77
D8Ertd158e	up	1.70	4.41E-02	chr8(+):111261493-111266700	UCSC	DNA segment, Chr 8,	---	AK142804	---	---	6.43	7.19
9130230L23Rik	up	1.70	1.42E-02	chr5(-):66370597-66395525	UCSC	RIKEN cDNA 913023	---	AK033717	231253	ENSMUSG00000054598	6.76	7.52
---	up	1.70	2.18E-02	chr3(-):142049564-142051871	UCSC	---	---	AK051662	---	---	7.97	8.74
---	up	1.70	2.68E-02	chr2(-):59731151-59734695	UCSC	---	---	AK082531	---	---	5.98	6.75
---	up	1.70	4.60E-03	chr18(+):4930516-4933084	UCSC	---	---	AK048076	---	---	7.15	7.92
---	up	1.70	7.80E-03	chr15(-):59619972-59626515	UCSC	---	---	AK035211	---	---	6.64	7.41
---	up	1.70	1.65E-02	chr14(+):55737731-55739773	UCSC	---	---	AK149241	---	---	4.93	5.69
---	up	1.70	4.25E-02	chr13(+):23673882-23674604	UCSC	---	---	AK158400	---	---	6.61	7.37
---	up	1.70	1.75E-02	chr12(-):88232354-88233518	UCSC	---	---	AK087306	---	---	6.43	7.19
Zbtb42	up	1.70	2.52E-02	chr12(+):113917039-113920957	UCSC	zinc finger and BTB d	Gm5188 // simiRP58	BC046387	382639	ENSMUSG00000037638	7.37	8.14
Ndel1	up	1.70	1.57E-02	chr11(-):68634951-68685360	UCSC	nuclear distribution ge	2600006O07Rik // mNudel	BC021434	83431	ENSMUSG00000018736	8.99	9.76
---	up	1.69	4.52E-02	chr6(-):99339072-99342668	UCSC	---	---	AK037331	---	---	7.03	7.78

Supplementary Table S1. List of the 997 Regulated Genes of AML mice treated with ABT-737(Fold-change ≥ 1.5; P-Value ≤ 0.05); 764 upregulated and 233 downregulated genes.

GEO Accession No.: GSE48601

Gene Symbol	Regulation	Fold-Change	P-Value	Gene Coordinates (hg19)	UCSC Link	Gene Name	Aliases and Synonyms	Representative Transcript ID	Entrez Gene ID	EnsEMBL ID	Intensity NRAS-BCL2	Intensity NRAS-BCL2 ABT-737
Gm15832 // Rnf149	up	1.69	3.57E-02	chr1(-):39604433-39634252	UCSC	predicted gene 15832	1600023E10Rik // Greul4	AK155360	67702	0000048234 // ENSMUSG	9.46	10.22
---	up	1.69	2.11E-02	chr16(+):45198870-45200311	UCSC	---	---	AK142053	---	---	6.62	7.38
Trib1	up	1.69	2.71E-02	chr15(+):59479904-59488654	UCSC	tribbles homolog 1 (Dr	A530090O15Rik // Trb1	AK028626	211770	ENSMUSG00000032501	9.01	9.77
Gpr137b-ps	up	1.69	2.13E-02	chr13(-):12707325-12742662	UCSC	G protein-coupled rec	ENSMUSG00000075118	AF154337	664862	ENSMUSG00000075118	9.42	10.18
B230327D02Rik	up	1.69	3.21E-02	chr12(-):85252301-85256226	UCSC	RIKEN cDNA B23032	---	AK045959	---	---	7.60	8.36
Pik3r6	up	1.69	4.81E-02	chr11(+):68316583-68366199	UCSC	phosphoinositide-3-kir	---	AK169948	104709	ENSMUSG00000046207	8.23	8.98
---	up	1.68	1.63E-02	chr6(-):3275742-3277855	UCSC	---	---	AK138008	---	---	6.92	7.67
---	up	1.68	8.00E-03	chr4(+):115489112-115490999	UCSC	---	---	AK046632	---	---	6.65	7.40
Fnip2	up	1.68	2.13E-02	chr3(-):79259896-79304444	UCSC	folliculin interacting pr	D630023B12Rik // mKIAA1450	BC116317	---	ENSMUSG00000061175	7.79	8.54
---	up	1.68	1.72E-02	chr19(-):45146756-45148927	UCSC	---	---	AK035482	---	---	5.98	6.73
Apol8	up	1.68	8.86E-03	chr15(-):77578229-77587413	UCSC	apolipoprotein L 8	9830006J20Rik // Apol2	AK046043	239552	ENSMUSG00000056656	7.41	8.16
---	up	1.68	4.80E-03	chr11(-):51397429-51398155	UCSC	---	---	AK050077	---	---	7.48	8.23
Fes	up	1.67	3.41E-02	chr7(-):87522642-87532845	UCSC	feline sarcoma oncoge	c-fes	BC038130	14159	ENSMUSG00000053158	8.92	9.67
2610306O10Rik	up	1.67	2.44E-02	chr7(+):135682446-135683057	UCSC	RIKEN cDNA 261030	---	AK012000	---	---	8.74	9.47
Izumo1 // Rasip1	up	1.67	4.34E-03	chr7(+):52877181-52894463	UCSC	izumo sperm-egg fusi	1700058F15Rik // 2610025P08R	AK156602	69903 // 73456	0000044562 // ENSMUSG	7.11	7.85
---	up	1.67	2.31E-02	chr6(-):70264897-70265190	UCSC	---	---	X63807	---	---	12.37	13.11
---	up	1.67	3.30E-02	chr5(-):20636894-20637842	UCSC	---	---	AK155887	---	---	5.94	6.68
D5Ertd255e	up	1.67	1.74E-02	chr5(+):119053829-119055139	UCSC	DNA segment, Chr 5,	---	AK157080	---	---	7.15	7.89
---	up	1.67	4.19E-02	chr5(+):98460614-98463024	UCSC	---	---	AK085795	---	---	6.18	6.92
---	up	1.67	1.72E-03	chr2(-):73301402-73303562	UCSC	---	---	AK047286	---	---	8.46	9.20
---	up	1.67	1.90E-02	chr1(-):99980446-99981786	UCSC	---	---	AK149050	---	---	6.24	6.98
Slc9a3r2	up	1.67	4.73E-02	chr17(-):24776233-24787251	UCSC	solute carrier family 9	0610011L07Rik // 1200011K07R	AK084801	65962	ENSMUSG00000002504	7.76	8.50
Card10	up	1.67	3.17E-02	chr15(-):78605568-78633472	UCSC	caspase recruitment d	Bimp1 // CARMA3	BC060203	105844	ENSMUSG00000033170	7.65	8.39
Naip2	up	1.67	2.31E-02	chr13(-):100914018-100972047	UCSC	NLR family, apoptosis	Birc1b // Naip-rs6 // Naip2	AY147001	17948	ENSMUSG00000078945	8.36	9.10
E230032D23Rik	up	1.66	1.41E-02	chr7(+):150813978-150856519	UCSC	RIKEN cDNA E23003	---	AK155734	---	---	7.08	7.81
---	up	1.66	4.42E-02	chr6(+):58643462-58644855	UCSC	---	---	AK136611	---	---	5.95	6.68
Ufsp1	up	1.66	2.10E-03	chr5(+):137735876-137736892	UCSC	UFM1-specific peptida	2700038N03Rik // D5Ertd655e	BC087958	70240	ENSMUSG00000051502	6.87	7.60
---	up	1.66	1.68E-02	chr18(-):44792017-44793420	UCSC	---	---	AK082442	---	---	7.69	8.42
Airn	up	1.66	2.22E-02	chr17(+):12959885-12960936	UCSC	antisense Igf2r RNA	2810051F02Rik // 2810434M15R	AK081743	104103	ENSMUSG00000064070	6.30	7.03
Prr13	up	1.66	4.12E-03	chr15(+):102289602-102293240	UCSC	proline rich 13	1110020C13Rik // 2010324E22R	AK003850	66151	ENSMUSG00000023048	10.25	10.98
---	up	1.66	1.02E-02	chr13(+):110612954-110617992	UCSC	---	---	AK143709	---	---	6.80	7.53
---	up	1.66	2.82E-02	chr11(-):29675390-29676571	UCSC	---	---	AK052982	---	---	6.50	7.24
Trpm2	up	1.66	3.88E-02	chr10(-):77371672-77432599	UCSC	transient receptor pote	9830168K16Rik // LTRPC2 // TR	AB166747	28240	ENSMUSG00000009292	7.40	8.13
Slc6a8	up	1.65	4.18E-02	chrX(+):70918489-70927837	UCSC	solute carrier family 6	Creat // CRT	AF459435	102857	ENSMUSG00000019558	7.19	7.91
---	up	1.65	3.41E-02	chr7(-):107104174-107107511	UCSC	---	---	AK143127	---	---	7.41	8.13
Scn1b	up	1.65	1.81E-02	chr7(-):31901543-31912053	UCSC	sodium channel, volta	---	BC039140	20266	ENSMUSG00000019194	7.12	7.84
---	up	1.65	4.78E-02	chr5(+):150953186-150956202	UCSC	---	---	AK080368	---	---	6.89	7.61
1700056E22Rik	up	1.65	1.95E-02	chr1(-):185856911-185857453	UCSC	RIKEN cDNA 170005	---	AK006811	73363	ENSMUSG00000044854	6.94	7.66
Fcer1g	up	1.65	2.06E-02	chr1(-):173159709-173164438	UCSC	Fc receptor, IgE, high	Fce1g // FcR-gamma // FcRgam	AK155600	14127	ENSMUSG00000058715	12.05	12.77
---	up	1.65	4.63E-02	chr2(-):152639986-152643242	UCSC	---	---	AK029192	---	---	6.27	6.99
---	up	1.65	2.19E-02	chr16(-):19198647-19260937	UCSC	---	---	AY170594	---	---	11.36	12.08
Il18r1	up	1.65	6.32E-03	chr1(+):40522396-40557698	UCSC	interleukin 18 recepto	Il18ralpha // Il1rrp	AK170705	16182	ENSMUSG00000026070	7.72	8.44
B4galt3	up	1.65	1.24E-02	chr1(+):173200473-173207027	UCSC	UDP-Gal:betaGlcNAc	9530061M23Rik // beta4GalT-III	AK155471	57370	ENSMUSG00000052423	8.75	9.48
---	up	1.65	3.84E-02	chr13(-):51769165-51771231	UCSC	---	---	AK140531	---	---	6.87	7.60
---	up	1.65	4.83E-02	chr11(-):106252163-106255073	UCSC	---	---	AK135003	---	---	6.73	7.45
Atg7	up	1.64	3.12E-02	chr6(+):114593142-114810630	UCSC	autophagy-related 7 (y	1810013K23Rik // Apg7l	AK146992	74244	ENSMUSG00000030314	9.09	9.81
Pde8a	up	1.64	3.67E-02	chr7(+):88358479-88479417	UCSC	phosphodiesterase 8A	Pde8	AK148238	18584	ENSMUSG00000025584	8.63	9.34
---	up	1.64	1.08E-02	chr6(-):69773346-69773635	UCSC	---	---	M34528	---	---	12.27	12.99
Il17ra	up	1.64	1.83E-02	chr6(+):120413244-120433747	UCSC	interleukin 17 recepto	Il17r // VDw217	AK080226	16172	ENSMUSG00000002897	10.15	10.87
Orai2	up	1.64	8.04E-03	chr5(-):136623334-136646526	UCSC	ORAI calcium release	A730041O15Rik // Tmem142b	AK042940	269717	ENSMUSG00000039747	7.12	7.84
5830438M01Rik	up	1.64	6.99E-04	chr16(+):32303213-32304580	UCSC	RIKEN cDNA 583043	---	AK017980	---	---	6.10	6.81
9130004J05Rik	up	1.64	3.11E-02	chr15(-):64118016-64120310	UCSC	RIKEN cDNA 913000	---	AK159040	---	ENSMUSG00000078299	7.82	8.54
Pde1b	up	1.64	4.96E-03	chr15(+):103333465-103360483	UCSC	phosphodiesterase 1B	---	BC058531	18574	ENSMUSG00000022489	8.04	8.75
---	up	1.64	4.71E-02	chr14(-):66798243-66799682	UCSC	---	---	AK040874	---	---	7.46	8.18
---	up	1.64	2.88E-02	chr13(-):102507346-102511389	UCSC	---	---	AK161087	---	---	8.16	8.88
---	up	1.64	3.17E-02	chr1(+):141070245-141075537	UCSC	---	---	AK087124	---	---	6.69	7.40
---	up	1.64	4.02E-03	chr1(+):91701105-91702223	UCSC	---	---	AK080524	---	---	7.50	8.21
---	up	1.64	2.30E-02	chr11(-):33981900-33985355	UCSC	---	---	AK051631	---	---	6.36	7.08
Grn	up	1.64	2.46E-02	chr11(+):102291795-102298127	UCSC	granulin	acrogranulin // epithelin // PCell	AK018744	14824	ENSMUSG00000034708	10.96	11.67
---	up	1.63	5.48E-03	chrX(-):57480170-57481662	UCSC	---	---	AK043987	---	---	6.16	6.87
---	up	1.63	3.07E-02	chr9(-):113879102-113880119	UCSC	---	---	AK016042	---	---	7.42	8.12
Gm10621	up	1.63	4.58E-02	chr9(+):108551059-108553284	UCSC	predicted gene 10621	---	AK155210	100038635	ENSMUSG00000074075	7.76	8.47
Dapk2	up	1.63	3.07E-02	chr9(+):66006041-66120047	UCSC	death-associated prot	---	AB018002	13143	ENSMUSG00000032380	7.12	7.82
---	up	1.63	4.42E-02	chr7(+):142735400-142737651	UCSC	---	---	AK037215	---	---	7.59	8.29
Rab7	up	1.63	5.66E-03	chr6(-):87949104-87995257	UCSC	RAB7, member RAS c	---	AK148117	19349	ENSMUSG00000079477	8.93	9.63
Antxr2	up	1.63	1.26E-02	chr5(-):98311802-98460062	UCSC	anthrax toxin receptor	2310046B19Rik // cl-35 // CMG-2	AK166124	71914	ENSMUSG00000029338	9.63	10.33
Cxcl10	up	1.63	4.76E-03	chr5(-):92775667-92777916	UCSC	chemokine (C-X-C mo	C7 // CRG-2 // gIP-10 // Ifi10 // IN	AK152967	15945	ENSMUSG00000034855	8.16	8.86
---	up	1.63	2.61E-02	chr4(-):59530855-59533322	UCSC	---	---	AK077900	---	---	7.73	8.44
Pla2g2e	up	1.63	8.82E-03	chr4(+):138433857-138438730	UCSC	phospholipase A2, grc	mGIIEsPLA2s	AF112984	26970	ENSMUSG00000028751	7.54	8.25
Lrsam1	up	1.63	1.20E-02	chr2(-):32780742-32816771	UCSC	leucine rich repeat an	MGC:56830	BC049146	227738	ENSMUSG00000026792	7.07	7.78
---	up	1.63	2.55E-02	chr2(+):131846942-131849651	UCSC	---	---	AK042504	---	---	7.01	7.72
---	up	1.63	1.78E-02	chr19(-):9939414-9943485	UCSC	---	---	AK084060	---	---	6.50	7.21
Vps37c	up	1.63	2.44E-02	chr19(+):10763223-10789117	UCSC	vacuolar protein sortin	5730409F24Rik	AK158833	107305	ENSMUSG00000048832	8.21	8.92
Slc14a1	up	1.63	3.63E-02	chr18(-):78296831-78338859	UCSC	solute carrier family 14	2610507K20Rik // 3021401A05R	AK041979	108052	ENSMUSG00000059336	8.10	8.81
---	up	1.63	1.57E-02	chr1(-):52841534-52845677	UCSC	---	---	AK042597	---	---	7.39	8.09
Ets2	up	1.63	3.96E-02	chr16(+):95924027-95942658	UCSC	E26 avian leukemia or	Ets-2	AK038348	23872	ENSMUSG00000022895	9.66	10.37
4930555K19Rik	up	1.63	2.36E-03	chr15(+):41005246-41006971	UCSC	RIKEN cDNA 493055	---	AK016133	---	ENSMUSG00000048559	7.76	8.46
Naip5	up	1.63	2.08E-02	chr13(-):100981704-101017295	UCSC	NLR family, apoptosis	Birc1e // Lgn1 // Naip-rs3	AF381771	17951	ENSMUSG00000071203	8.06	8.76
---	up	1.63	4.66E-02	chr13(+):97346580-97347878	UCSC	---	---	AK081610	---	---	7.03	7.73
Ncf2	up	1.63	2.16E-02	chr1(+):154647324-154684121	UCSC	neutrophil cytosolic fa	NADPHoxidasesubunit(67kDa) //	BC076609	17970	ENSMUSG00000026480	8.26	8.96
Gab3	up	1.62	1.61E-02	chrX(-):72212182-72330245	UCSC	growth factor receptor	5930433H21Rik	AK039787	210710	ENSMUSG00000032750	7.98	8.67
---	up	1.62	2.36E-02	chr10(-):6596880-6599631	UCSC	---	---	AK084167	---	---	6.68	7.38
---	up	1.62	3.05E-02	chr8(-):42462790-42466106	UCSC	---	---	AK086706	---	---	6.42	7.12
Sertad1	up	1.62	1.91E-02	chr7(+):28271929-28275333	UCSC	SERTA domain contai	1110032C13Rik // p34SEI-1 // Se	AF366401	55942	ENSMUSG00000008384	7.65	8.34

Supplementary Table S1. List of the 997 Regulated Genes of AML mice treated with ABT-737(Fold-change ≥ 1.5; P-Value ≤ 0.05); 764 upregulated and 233 downregulated genes.

GEO Accession No.: GSE48601

Gene Symbol	Regulation	Fold-Change	P-Value	Gene Coordinates (hg19)	UCSC Link	Gene Name	Aliases and Synonyms	Representative Transcript ID	Entrez Gene ID	EnsEMBL ID	Intensity NRAS-BCL2	Intensity NRAS-BCL2 ABT-737
---	up	1.62	1.48E-02	chr1(+):60834133-60835127	UCSC	---	---	AK037749	---	---	8.96	9.66
Capn2	up	1.62	4.03E-02	chr1(-):184397387-184447741	UCSC	calpain 2	Capa-2 // Capa2 // m-calpain	D38117	12334	ENSMUSG00000026509	9.29	9.99
Orm2	up	1.62	6.78E-03	chr4(+):63023508-63026912	UCSC	orosomucoid 2	Orm-2	BC057985	18406	ENSMUSG00000061540	7.89	8.59
Atp11b	up	1.62	2.88E-02	chr3(+):35653056-35755196	UCSC	ATPase, class VI, type	1110019I14Rik // mKIAA0956	AK129248	76295	ENSMUSG00000037400	10.32	11.02
Hcfc1r1	up	1.62	2.84E-03	chr17(+):23810575-23812491	UCSC	host cell factor C1 reg	---	AK013438	353502	ENSMUSG00000023904	8.85	9.55
Synj1	up	1.62	1.75E-02	chr16(-):90960737-91011310	UCSC	synaptojanin 1	A930006D20Rik // mKIAA0910	AK080946	104015	ENSMUSG00000022973	8.70	9.40
Fam135a	up	1.62	2.21E-02	chr1(-):24017934-24107181	UCSC	family with sequence s	4921533L14Rik	BC070446	68187	ENSMUSG00000026153	6.76	7.45
Numb	up	1.62	8.20E-03	chr12(-):85134984-85262808	UCSC	numb gene homolog (	m-numb // mnb	BC033459	18222	ENSMUSG00000021224	9.93	10.62
610010K14Rik // Rnase	up	1.62	4.88E-03	chr11(-):70048710-70053349	UCSC	RIKEN cDNA 061001(	1110020A23Rik // 2310033H11R	BC012258	104457 // 52898	)000020831 // ENSMUSG	9.58	10.28
Pls1	up	1.61	4.12E-02	chr9(-):95653065-95745681	UCSC	plastin 1 (I-isoform)	I-fimbrin	AK133070	102502	ENSMUSG00000049493	6.99	7.68
---	up	1.61	4.93E-02	chr8(-):101609804-101612304	UCSC	---	---	AK148860	---	---	6.81	7.50
Zswim4	up	1.61	2.90E-03	chr8(-):86734577-86760955	UCSC	zinc finger, SWIM don	E130119J17Rik	AK053663	212168	ENSMUSG00000035671	8.34	9.02
---	up	1.61	3.74E-02	chr8(-):34970895-34973443	UCSC	---	---	AK033637	---	---	7.09	7.78
D830044I16Rik	up	1.61	2.37E-02	chr7(-):134115234-134119613	UCSC	RIKEN cDNA D83004	---	AK086010	381922	ENSMUSG00000087483	7.29	7.97
Derl3	up	1.61	4.02E-02	chr10(+):75356143-75358686	UCSC	Der1-like domain fami	1810006I20Rik // 1810063P04Ri	AB047555	70377	ENSMUSG00000009092	10.38	11.07
---	up	1.61	4.98E-02	chr4(+):41087787-41108894	UCSC	---	---	AK136940	---	---	7.79	8.48
Nup210l	up	1.61	1.88E-02	chr3(+):89908054-89971908	UCSC	nucleoporin 210-like	4930548O11Rik	AK019752	77595	ENSMUSG00000027939	6.82	7.51
Cd59b	up	1.61	1.95E-04	chr2(+):103909962-103931345	UCSC	CD59b antigen	---	BC038128	333883	ENSMUSG00000068686	6.50	7.19
---	up	1.61	1.66E-02	chr1(-):13344564-13346811	UCSC	---	---	AK079436	---	---	7.72	8.41
Klf10	up	1.61	1.26E-02	chr15(-):38221219-38230464	UCSC	Kruppel-like factor 10	Egral // Gdnfif // mGIF // Tieg1	AK043433	21847	ENSMUSG00000037465	8.68	9.37
Cyb5r1	up	1.61	3.30E-02	chr1(+):136302358-136308315	UCSC	cytochrome b5 reducta	1500005G05Rik // B5R.1 // Nqo3	BC016266	72017	ENSMUSG00000026456	8.50	9.18
---	up	1.60	1.46E-02	chr9(+):66109962-66111564	UCSC	---	---	AK136641	---	---	6.42	7.10
Insr	up	1.60	1.30E-02	chr8(-):3095058-3279552	UCSC	insulin receptor	4932439J01Rik // CD220 // D630	BC172640	16337	ENSMUSG00000005534	8.18	8.85
Osgin1	up	1.60	2.27E-02	chr8(+):121961062-121970155	UCSC	oxidative stress induce	1700012B18Rik	BC022135	71839	ENSMUSG00000074063	7.71	8.39
---	up	1.60	6.24E-03	chr7(-):28423287-28424331	UCSC	---	---	BC104146	---	---	7.69	8.37
---	up	1.60	1.27E-02	chr6(+):66875614-66879407	UCSC	---	---	AK136294	---	---	7.41	8.09
---	up	1.60	4.70E-02	chr6(+):21943235-21946479	UCSC	---	---	AK084370	---	---	6.59	7.27
Thap6	up	1.60	2.57E-02	chr5(+):92391414-92401090	UCSC	THAP domain contain	4930534K21Rik	BC089377	381650	ENSMUSG00000060466	7.37	8.05
---	up	1.60	1.38E-02	chr4(+):116862548-116863496	UCSC	---	---	AK154548	---	---	6.91	7.59
---	up	1.60	1.13E-02	chr3(-):27511373-27514902	UCSC	---	---	AK142096	---	---	6.50	7.17
A930010G16Rik	up	1.60	1.93E-02	chr2(-):4939492-4940852	UCSC	RIKEN cDNA A93001(	C430048F02Rik	AK020843	---	---	7.98	8.66
Trp53inp2	up	1.60	1.40E-03	chr2(+):155207554-155215582	UCSC	transformation related	1110029F20Rik // Tp53inp2	AK170132	68728	ENSMUSG00000038375	9.94	10.61
2010002N04Rik	up	1.60	1.38E-03	chr18(-):60633847-60661641	UCSC	RIKEN cDNA 201000	cl-41 // Nid67	AK143383	106878	ENSMUSG00000038059	8.55	9.23
C230073G13Rik	up	1.60	3.43E-02	chr17(+):71202103-71206299	UCSC	RIKEN cDNA C23007	---	AK082636	---	---	7.72	8.40
---	up	1.60	1.94E-02	chr16(+):23989161-23992539	UCSC	---	---	AK149722	---	---	7.69	8.37
---	up	1.60	4.55E-02	chr1(+):196819454-196822389	UCSC	---	---	AK148519	---	---	7.24	7.92
Arl11	up	1.60	2.22E-02	chr14(+):61928590-61930773	UCSC	ADP-ribosylation factc	ARLTS1 // C730007L20Rik	BC064093	219144	ENSMUSG00000043157	7.67	8.35
Samd8	up	1.60	3.01E-04	chr14(+):22569752-22617947	UCSC	sterile alpha motif don	1110053F04Rik // 1700010P07R	AK147528	67630	ENSMUSG00000021770	8.06	8.74
Gpr137b	up	1.60	3.24E-02	chr13(-):13449890-13485891	UCSC	G protein-coupled rec	2310041G17Rik // C80741 // Tm	AK080884	83924	ENSMUSG00000021306	10.88	11.55
Ccdc88c	up	1.60	3.74E-03	chr12(-):102149734-102267269	UCSC	coiled-coil domain con	0610010D24Rik // Daple	BC063255	68339	ENSMUSG00000021182	9.48	10.16
F7	up	1.59	4.45E-02	chr8(+):13026033-13035809	UCSC	coagulation factor VII	Cf7 // FVII // mfVII	AK154742	14068	ENSMUSG00000031443	7.29	7.96
Arrb1	up	1.59	2.16E-02	chr7(+):106683974-106755281	UCSC	arrestin, beta 1	1200006I17Rik // beta-arrestin1	AK147566	109689	ENSMUSG00000018909	9.54	10.21
Vsig10l	up	1.59	8.14E-03	chr7(+):50726428-50727383	UCSC	ZV-set and immunoglc	2210412E05Rik	AK008908	75690	ENSMUSG00000070604	9.04	9.70
---	up	1.59	7.20E-03	chr5(+):123109748-123111574	UCSC	---	---	AK086885	---	---	6.54	7.21
Gm10459	up	1.59	2.29E-02	chr5(+):33994749-33995904	UCSC	predicted gene 10459	---	AK132920	---	ENSMUSG00000073044	6.84	7.51
Optn	up	1.59	3.77E-02	chr2(-):4941688-4985091	UCSC	optineurin	4930441O07Rik // TFIIIA-INTP	BC061185	71648	ENSMUSG00000026672	7.29	7.95
Tmem63b	up	1.59	3.44E-03	chr17(-):45797121-45823172	UCSC	transmembrane protei	---	AK159673	224807	ENSMUSG00000036026	8.60	9.27
Lima1	up	1.59	2.28E-02	chr15(-):99608904-99705849	UCSC	LIM domain and actin	1110021C24Rik // 3526402A12R	AK049350	65970	ENSMUSG00000023022	6.86	7.53
3100002H20Rik	up	1.59	3.34E-03	chr15(-):72616146-72617516	UCSC	RIKEN cDNA 310000	---	AK013917	---	---	7.55	8.22
Ahnak2	up	1.59	1.40E-02	chr12(-):114023209-114040869	UCSC	AHNAK nucleoprotein	LOC382643	AK138503	100041194	ENSMUSG00000072812	7.23	7.89
2310058N22Rik	up	1.59	2.81E-02	chr12(+):117617687-117619252	UCSC	RIKEN cDNA 231005(	---	AK009987	---	---	7.49	8.16
Farp2	up	1.59	7.70E-03	chr1(+):95408654-95518551	UCSC	FERM, RhoGEF and p	D030026M03Rik // Fir	AK050860	227377	ENSMUSG00000034066	6.95	7.62
---	up	1.59	4.75E-02	chr11(-):6190873-6191850	UCSC	---	---	AK085849	---	---	6.09	6.76
B930032C10Rik	up	1.58	4.39E-02	chr9(+):56821681-56822545	UCSC	RIKEN cDNA B93003	---	AK047178	---	---	6.78	7.45
---	up	1.58	3.53E-02	chr6(-):72552998-72555496	UCSC	---	---	AK045661	---	---	8.88	9.54
---	up	1.58	9.81E-04	chr4(-):14727393-14728408	UCSC	---	---	AK045390	---	---	6.62	7.28
---	up	1.58	3.92E-02	chr1(-):133901165-133904587	UCSC	---	---	AK086589	---	---	7.58	8.24
Map4k3	up	1.58	1.07E-02	chr17(-):80979855-81127356	UCSC	mitogen-activated prot	4833416M07Rik // 9530052P13R	BC172686	225028	ENSMUSG00000024242	7.96	8.63
Sun2	up	1.58	3.15E-02	chr15(-):79554501-79572967	UCSC	Sad1 and UNC84 dom	B230369L08Rik // Unc84b	AK172398	223697	ENSMUSG00000042524	10.59	11.25
---	up	1.58	3.27E-02	chr15(+):38448540-38449821	UCSC	---	---	AK007010	---	---	7.17	7.83
---	up	1.58	3.01E-02	chr11(-):60050099-60051715	UCSC	---	---	AK054085	---	---	7.62	8.28
---	up	1.57	2.85E-02	chr9(+):58443041-58444380	UCSC	---	---	AK037677	---	---	7.02	7.68
D10Ertd709e	up	1.57	4.62E-02	chr10(+):110605692-110611969	UCSC	DNA segment, Chr 10	---	AK155618	---	---	9.72	10.37
---	up	1.57	1.70E-02	chr7(-):74512602-74515867	UCSC	---	---	AK142457	---	---	8.61	9.26
---	up	1.57	2.37E-02	chr6(+):145252830-145253703	UCSC	---	---	AK084624	---	---	6.40	7.04
4930509K18Rik	up	1.57	2.11E-02	chr4(+):40260263-40264752	UCSC	RIKEN cDNA 493050(	---	AK015738	75819	ENSMUSG00000087137	5.54	6.19
Txnip	up	1.57	7.34E-03	chr3(+):96361880-96365780	UCSC	thioredoxin interacting	Hyplip1 // mVDUP1 // THIF // VD	AK089403	56338	ENSMUSG00000038393	11.01	11.66
S100a11	up	1.57	1.53E-02	chr3(+):93324416-93330209	UCSC	S100 calcium binding	cal // calgizzarin // Emap1 // S10(	AK164352	20195	ENSMUSG00000027907	12.11	12.76
9630019E01Rik	up	1.57	1.90E-02	chr2(-):146227353-146230503	UCSC	RIKEN cDNA 963001(	---	AK051384	---	---	6.12	6.78
A430019L02Rik	up	1.57	5.28E-03	chr18(+):46918210-46921631	UCSC	RIKEN cDNA A43001(	---	AK039850	---	---	9.75	10.40
---	up	1.57	3.67E-02	chr16(-):84949930-84954283	UCSC	---	---	AK132225	---	---	7.42	8.07
Ly6c1	up	1.57	1.94E-02	chr15(-):74875447-74879260	UCSC	lymphocyte antigen 6	Ly-6C // Ly6c	BC010764	17067	ENSMUSG00000079018	11.89	12.54
---	up	1.57	1.32E-02	chr12(-):82815947-82817018	UCSC	---	---	AK049005	---	---	8.08	8.73
---	up	1.57	4.19E-02	chr11(-):103533947-103535970	UCSC	---	---	AK078572	---	---	7.55	8.20
Ddx26b	up	1.56	2.41E-02	chrX(+):53708024-53761019	UCSC	DEAD/H (Asp-Glu-Ala	4930535D10Rik // 6330505F04R	AK083942	236790	ENSMUSG00000035967	9.10	9.74
Prickle3	up	1.56	9.00E-04	chrX(+):7234512-7245312	UCSC	prickle homolog 3 (Dr	Lmo6 // Sfc16	BC023671	54630	ENSMUSG00000031145	8.06	8.70
---	up	1.56	2.08E-02	chr5(-):4868348-4870266	UCSC	---	---	AK140028	---	---	6.27	6.91
Pxn	up	1.56	4.80E-02	chr5(+):115956696-116005995	UCSC	paxillin	Pax	AK149933	19303	ENSMUSG00000029528	10.23	10.87
---	up	1.56	4.11E-02	chr5(+):54437971-54440089	UCSC	---	---	AK036868	---	---	6.51	7.15
Blcap	up	1.56	1.64E-02	chr2(-):157382099-157392098	UCSC	bladder cancer associ	Bc10	AK018127	53619	ENSMUSG00000067787	8.11	8.75
4833420D23Rik	up	1.56	2.27E-02	chr18(+):10747875-10748963	UCSC	RIKEN cDNA 483342(	---	AK014733	---	---	5.94	6.59
Igl-V1	up	1.56	2.76E-02	chr16(-):19061721-19085594	UCSC	immunoglobulin lambd	1810027O01Rik	AK008094	16142	ENSMUSG00000076934	12.57	13.22
Col4a3bp	up	1.56	2.16E-02	chr13(+):97312572-97407970	UCSC	collagen, type IV, alph	2810404O15Rik // 9230101K08R	AK030305	68018	ENSMUSG00000021669	9.22	9.87
Rara	up	1.56	9.60E-03	chr11(+):98798989-98836254	UCSC	retinoic acid receptor,	RARalpha1	BC040383	19401	ENSMUSG00000037992	9.56	10.20

Supplementary Table S1. List of the 997 Regulated Genes of AML mice treated with ABT-737(Fold-change ≥ 1.5; P-Value ≤ 0.05); 764 upregulated and 233 downregulated genes.

GEO Accession No.: GSE48601

Gene Symbol	Regulation	Fold-Change	P-Value	Gene Coordinates (hg19)	UCSC Link	Gene Name	Aliases and Synonyms	Representative Transcript ID	Entrez Gene ID	EnsEMBL ID	Intensity NRAS-BCL2	Intensity NRAS-BCL2 ABT-737
---	up	1.55	4.98E-02	chr9(-):73762497-73765678	UCSC	---	---	AK143113	---	---	5.91	6.55
Tcp11l2	up	1.55	2.16E-02	chr10(+):84039369-84077098	UCSC	t-complex 11 (mouse)	E430026E19Rik	AK146035	216198	ENSMUSG00000020034	8.97	9.60
Apob48r	up	1.55	3.38E-02	chr7(+):133728455-133732638	UCSC	apolipoprotein B48 rec	Apob-48r	AK156422	171504	ENSMUSG00000042759	7.43	8.06
Leng9	up	1.55	4.10E-02	chr7(+):4100927-4101997	UCSC	leukocyte receptor clu	9530024C23Rik // F630035L11R	AK143899	243813	ENSMUSG00000043432	7.86	8.49
Ulk1	up	1.55	6.14E-03	chr5(-):111213507-111239118	UCSC	Unc-51 like kinase 1 (r	mKIAA0722 // Unc51.1	AK154939	22241	ENSMUSG00000029512	8.61	9.24
---	up	1.55	1.39E-02	chr2(-):128211989-128215224	UCSC	---	---	AK049458	---	---	6.81	7.44
---	up	1.55	3.59E-02	chr2(+):164352390-164355181	UCSC	---	---	AK162674	---	---	6.42	7.05
---	up	1.55	3.92E-03	chr15(+):12286809-12289792	UCSC	---	---	AK046972	---	---	7.03	7.66
Naip6 // Naip7	up	1.55	3.16E-02	chr13(-):101051035-101087630	UCSC	NLR family, apoptosis	Birc1f // Birc1g // Naip-rs4 // Naip	AF135494	17952	ENSMUSG00000078942	8.93	9.56
Ern1	up	1.55	4.18E-02	chr11(-):106213544-106349169	UCSC	endoplasmic reticulum	9030414B18Rik // Ire1a // Ire1alp	BC156947	78943	ENSMUSG00000020715	9.24	9.88
Mapk7	up	1.55	4.49E-02	chr11(-):61302314-61307741	UCSC	mitogen-activated prot	bigMAPkinase1 // BMK1 // ERK5	BC033598	23939	ENSMUSG00000001034	8.48	9.11
Lpar4	up	1.54	1.28E-02	chrX(+):104115974-104127826	UCSC	lysophosphatidic acid	5730485F04Rik // Gpr23 // LPA4	BC052178	78134	ENSMUSG00000049929	6.42	7.04
Klhl18	up	1.54	3.23E-02	chr9(-):110328431-110379198	UCSC	kelch-like 18 (Drosoph	MGC:36415	AK173029	270201	ENSMUSG00000054792	8.97	9.59
---	up	1.54	3.73E-02	chr9(-):30996839-31004373	UCSC	---	---	AK139891	---	---	7.19	7.82
Scarb2	up	1.54	4.40E-02	chr5(-):92870335-92934667	UCSC	scavenger receptor cla	9330185J12Rik // Cd36l2 // LGP	AK149102	12492	ENSMUSG00000029426	8.72	9.34
Cldn12	up	1.54	4.16E-02	chr5(-):5505111-5514873	UCSC	claudin 12	---	BC024057	64945	ENSMUSG00000046798	7.06	7.68
---	up	1.54	9.18E-04	chr5(+):140797574-140799798	UCSC	---	---	AK033884	---	---	7.19	7.82
---	up	1.54	4.81E-02	chr5(+):34938989-34941762	UCSC	---	---	AK137996	---	---	7.39	8.02
---	up	1.54	1.54E-03	chr4(+):154939967-154943551	UCSC	---	---	AK049013	---	---	7.65	8.27
Cd101	up	1.54	3.26E-02	chr3(-):100797588-100833418	UCSC	CD101 antigen	Igsf2 // LOC381460	AM849329	630146	ENSMUSG00000086564	7.12	7.75
---	up	1.54	3.24E-02	chr3(-):78939643-78942394	UCSC	---	---	AK086153	---	---	6.44	7.07
---	up	1.54	1.51E-02	chr1(-):36418467-36420462	UCSC	---	---	AK054094	---	---	7.66	8.29
Dopey2	up	1.54	9.32E-03	chr16(+):93712174-93810835	UCSC	dopey family member	0610038M01Rik // 2610510B01R	AK147255	70028	ENSMUSG00000022946	8.51	9.14
Tram2	up	1.54	1.24E-02	chr1(-):20991460-21069307	UCSC	translocating chain-as	C330003D03Rik // MGC:25725	BC018212	170829	ENSMUSG00000041779	9.92	10.55
Tmem71	up	1.54	3.82E-03	chr15(-):66357774-66392609	UCSC	transmembrane protei	---	AK088711	213068	ENSMUSG00000036944	9.44	10.06
---	up	1.54	6.10E-03	chr1(+):195107465-195110037	UCSC	---	---	AK031888	---	---	8.98	9.61
D930049A15Rik	up	1.54	9.26E-03	chr14(-):26077009-26280615	UCSC	RIKEN cDNA D93004	---	AK086741	---	ENSMUSG00000087535	7.67	8.30
---	up	1.54	1.03E-02	chr14(+):17137024-17140838	UCSC	---	---	AK078789	---	---	7.81	8.44
Serpinc1	up	1.54	3.70E-02	chr1(+):162908777-162933141	UCSC	serine (or cysteine) pe	antithrombin // At-3 // At3 // ATIII	BC019447	11905	ENSMUSG00000026715	6.72	7.34
Dapk1	up	1.54	3.06E-02	chr13(+):60703313-60864551	UCSC	death associated prote	2310039H24Rik // 2810425C21R	BC060161	69635	ENSMUSG00000021559	7.13	7.76
7175 // Igh-1a // Igh-6 //	up	1.54	1.91E-02	chr12(-):114493110-117232532	UCSC	expressed sequence A	1810060O09Rik // B1H12 // B4H	AK007826	80795 // 380809 // 434609	00000076641 // ENSMUSG	11.07	11.70
---	up	1.54	2.63E-02	chr12(-):52756546-52760009	UCSC	---	---	AK042046	---	---	7.47	8.09
Adipor1	up	1.54	3.27E-02	chr1(+):136312031-136329925	UCSC	adiponectin receptor 1	2810031L11Rik	AK143680	72674	ENSMUSG00000026457	10.51	11.13
---	up	1.54	2.68E-03	chr10(-):119718296-119719255	UCSC	---	---	AK076735	---	---	7.21	7.83
F830004M19Rik	up	1.53	3.67E-02	chr8(-):89389399-89393422	UCSC	RIKEN cDNA F83000	---	AK089612	---	---	7.19	7.80
Klhl2	up	1.53	4.13E-02	chr8(-):67218472-67373822	UCSC	kelch-like 2, Mayven (	6030411N21Rik // ABP-KELCH /	AK220570	77113	ENSMUSG00000031605	7.26	7.87
Ftl1	up	1.53	1.71E-02	chr7(-):52713315-52715214	UCSC	ferritin light chain 1	Ftl // L-ferritin	AK088647	14325	ENSMUSG00000050708	9.70	10.31
---	up	1.53	1.20E-02	chr6(+):124915638-124918080	UCSC	---	---	AK158836	---	---	6.31	6.92
---	up	1.53	4.65E-02	chr4(+):149947626-149948645	UCSC	---	---	AK077776	---	---	8.61	9.22
---	up	1.53	1.51E-02	chr4(+):132715449-132717930	UCSC	---	---	AK038218	---	---	8.11	8.72
Il6ra	up	1.53	4.38E-02	chr3(-):88537959-89717119	UCSC	interleukin 6 receptor,	CD126 // IL-6R // IL-6receptoralp	X51976	16194	ENSMUSG00000027947	9.88	10.50
Cox4i2	up	1.53	2.12E-02	chr2(+):152579909-152590773	UCSC	cytochrome c oxidase	Cox4b // CoxIV-2	AF271382	84682	ENSMUSG00000009876	7.79	8.41
---	up	1.53	1.41E-02	chr2(+):131318142-131319023	UCSC	---	---	AK086876	---	---	8.62	9.24
Il1f6	up	1.53	2.13E-02	chr2(+):24070937-24081221	UCSC	interleukin 1 family, m	Fil1 // Fil1epsilon // IL-1H1	AK004061	54448	ENSMUSG00000026984	7.07	7.68
---	up	1.53	4.62E-02	chr18(-):10164047-10166553	UCSC	---	---	AK034190	---	---	8.10	8.71
Nfkbiz	up	1.53	6.20E-03	chr16(-):55811488-55839012	UCSC	nuclear factor of kappa	Mail	AB020974	80859	ENSMUSG00000035356	10.15	10.76
---	up	1.53	2.31E-02	chr16(+):93532631-93534278	UCSC	---	---	AK133433	---	---	7.54	8.15
9530001J02Rik	up	1.53	1.08E-02	chr15(-):77665519-77667263	UCSC	RIKEN cDNA 953000	---	AK079170	---	---	7.69	8.31
---	up	1.53	9.27E-03	chr15(+):6556394-6557469	UCSC	---	---	AK079993	---	---	8.35	8.96
---	up	1.53	1.28E-02	chr13(-):97955748-97958492	UCSC	---	---	AK138569	---	---	7.42	8.03
Syne2	up	1.53	1.13E-02	chr12(+):77132601-77211887	UCSC	synaptic nuclear envel	6820443O06Rik // D12Ertd777e	BC076568	319565	ENSMUSG00000063450	7.71	8.32
Tmc6	up	1.53	4.01E-02	chr11(-):117627300-117641954	UCSC	transmembrane chanr	D11Ertd204e // EVER1	AK090179	217353	ENSMUSG00000025572	9.74	10.36
Znrf3	up	1.53	3.10E-02	chr11(-):5178605-5281744	UCSC	zinc and ring finger 3	LOC382477	BC151083	407821	ENSMUSG00000041961	8.44	9.06
---	up	1.53	7.30E-03	chr11(+):77860487-77861858	UCSC	---	---	AK143021	---	---	7.58	8.20
Kcnq1ot1	up	1.52	3.72E-03	chr7(-):150485092-150486286	UCSC	KCNQ1 overlapping tr	Kvlqt1-as // Lit1	AK135351	---	---	6.30	6.90
---	up	1.52	5.48E-03	chr7(-):135552482-135554507	UCSC	---	---	AK079512	---	---	6.55	7.15
Cln3	up	1.52	3.14E-02	chr7(-):133714721-133729332	UCSC	ceroid lipofuscinosis, r	battenin	AK134036	12752	ENSMUSG00000030720	9.34	9.95
Cyp2s1	up	1.52	3.46E-02	chr7(-):26587490-26601933	UCSC	cytochrome P450, fam	1200011C15Rik	AK162947	74134	ENSMUSG00000040703	7.67	8.28
Dmpk	up	1.52	1.37E-02	chr7(+):19669219-19679168	UCSC	dystrophia myotonica-	DM // Dm15	BC056615	13400	ENSMUSG00000030409	7.67	8.27
---	up	1.52	3.42E-02	chr6(-):3283194-3296071	UCSC	---	---	AK035387	---	---	8.69	9.30
---	up	1.52	3.91E-02	chr6(+):120650428-120655206	UCSC	---	---	AK143075	---	---	6.14	6.75
Tpcn1	up	1.52	2.28E-03	chr5(-):120984167-121038683	UCSC	two pore channel 1	5730403B01Rik	AK148129	252972	ENSMUSG00000032741	8.60	9.21
Klf3	up	1.52	2.62E-03	chr5(+):65194627-65221368	UCSC	Kruppel-like factor 3 (b	9930027G08Rik // BKLF // Tef-2	AK157576	16599	ENSMUSG00000029178	10.04	10.65
Gm568	up	1.52	1.44E-03	chr4(-):47021191-47023653	UCSC	predicted gene 568	LOC230143	BC028561	---	ENSMUSG00000048824	7.78	8.38
Sirpa	up	1.52	4.08E-02	chr2(+):129418573-129457959	UCSC	signal-regulatory prote	Bit // CD172a // P84 // Ptpns1 // S	AK159617	19261	ENSMUSG00000037902	11.75	12.35
Snap23	up	1.52	2.05E-02	chr2(+):120393406-120426458	UCSC	synaptosomal-associa	SNAP-23 // Sndt // Syndet	AK019162	20619	ENSMUSG00000027287	10.21	10.81
Lypd6b	up	1.52	2.79E-02	chr2(+):49643206-49804366	UCSC	LY6/PLAUR domain c	2310010M24Rik	AK009282	71897	ENSMUSG00000026765	6.65	7.25
Pnma1	up	1.52	3.37E-02	chr12(-):85487082-85489442	UCSC	paraneoplastic antiger	5730402C15Rik	AK136933	70481	ENSMUSG00000054383	7.09	7.70
Pstpip1	up	1.51	2.09E-02	chr9(+):55937779-55976683	UCSC	proline-serine-threonir	CD2BP1 // def-2	AK088150	19200	ENSMUSG00000032322	9.31	9.91
Ranbp10	up	1.51	1.22E-02	chr8(-):108292210-108351251	UCSC	RAN binding protein 1	4432417N03Rik	AY337314	74334	ENSMUSG00000037415	9.08	9.67
Hgsnat	up	1.51	4.79E-02	chr8(-):27054926-27087220	UCSC	heparan-alpha-glucos	9430010M12Rik // D8Ertd354e //	AK035264	52120	ENSMUSG00000037260	8.11	8.71
Ypel3	up	1.51	5.28E-03	chr7(+):133920488-133924023	UCSC	yippee-like 3 (Drosoph	0610043B10Rik // 1190001G19R	AK003371	66090	ENSMUSG00000042675	10.25	10.85
Samd9l	up	1.51	2.90E-02	chr6(-):3322260-3349573	UCSC	sterile alpha motif don	ESTM25	BC079894	209086	ENSMUSG00000047735	9.13	9.73
Tgfbr3	up	1.51	4.87E-02	chr5(-):107535591-107718615	UCSC	transforming growth fa	1110036H20Rik // betaglycan // T	BC070428	21814	ENSMUSG00000029287	8.09	8.68
---	up	1.51	3.13E-02	chr4(-):120825289-120827210	UCSC	---	---	AK079898	---	---	8.47	9.06
Sdc3	up	1.51	2.36E-02	chr4(+):130348452-130382233	UCSC	syndecan 3	MGC:65603 // MGC:69616 // mK	AK129153	20970	ENSMUSG00000025743	9.36	9.96
Parp4	up	1.51	1.78E-03	chr14(+):57267106-57278635	UCSC	poly (ADP-ribose) poly	Adprtl1 // C030027K23Rik // E23	BC025847	328417	ENSMUSG00000054509	9.15	9.75
9530083O12Rik	up	1.51	4.69E-02	chr13(+):110245592-110254034	UCSC	RIKEN cDNA 953008	---	AK140818	---	---	5.98	6.57
---	up	1.51	4.54E-02	chr13(+):101053186-101086552	UCSC	---	---	BC126968	---	---	7.83	8.43
---	up	1.51	1.72E-02	chr1(+):153614309-153616055	UCSC	---	---	AK134516	---	---	7.17	7.77
Eml6	up	1.51	6.20E-03	chr11(-):29643051-29925941	UCSC	echinoderm microtubu	2900083P10Rik // C230094A16R	AK049034	237711	ENSMUSG00000044072	6.77	7.37
---	up	1.51	7.62E-03	chr10(-):58969126-58972521	UCSC	---	---	AK048905	---	---	6.83	7.42
Fut4	up	1.50	2.33E-02	chr9(-):14552903-14556566	UCSC	fucosyltransferase 4	3-fucosyl-N-acetyl-lactosaminee	AK041752	14345	ENSMUSG00000049307	7.22	7.80
Casp4	up	1.50	4.28E-02	chr9(+):5308858-5336783	UCSC	caspase 4, apoptosis-	Casp11 // Caspase-11 // ich-3	AK160328	12363	ENSMUSG00000033538	9.93	10.51

Supplementary Table S1. List of the 997 Regulated Genes of AML mice treated with ABT-737(Fold-change ≥ 1.5; P-Value ≤ 0.05); 764 upregulated and 233 downregulated genes.

GEO Accession No.: GSE48601

Gene Symbol	Regulation	Fold-Change	P-Value	Gene Coordinates (hg19)	UCSC Link	Gene Name	Aliases and Synonyms	Representative Transcript ID	Entrez Gene ID	EnsEMBL ID	Intensity NRAS-BCL2	Intensity NRAS-BCL2 ABT-737
---	up	1.50	4.95E-02	chr5(+):151178302-151178911	UCSC	---	---	AK051303	---	---	7.35	7.93
Cxcl3	up	1.50	2.55E-02	chr5(+):91215125-91217116	UCSC	chemokine (C-X-C mo	Dcip1	AY311403	330122	ENSMUSG00000029379	6.21	6.79
---	up	1.50	1.47E-02	chr5(+):32439289-32442017	UCSC	---	---	AK143311	---	---	8.76	9.34
---	up	1.50	4.85E-02	chr1(-):93848570-93850207	UCSC	---	---	AK143069	---	---	6.84	7.43
Ly6c2	up	1.50	2.54E-02	chr15(-):74938588-74942243	UCSC	lymphocyte antigen 6	---	D86232	100041546	ENSMUSG00000022584	12.78	13.37
1700112E06Rik	up	1.50	2.99E-02	chr14(+):23396948-23418490	UCSC	RIKEN cDNA 170011	2700009F18Rik	AK012226	76633	ENSMUSG00000063458	7.31	7.90
---	up	1.50	1.10E-03	chr11(+):85533350-85534384	UCSC	---	---	AK086099	---	---	6.31	6.90
Nfic	up	1.50	4.32E-02	chr10(-):80858936-80893883	UCSC	nuclear factor I/C	1110019L22Rik // 1500041O16R	AK147496	18029	ENSMUSG00000079936	8.31	8.90
S1pr3	down	2.99	2.34E-02	chr13(+):51504130-51518166	UCSC	sphingosine-1-phosph	Edg3 // LPb3 // S1P3	AK084944	13610	ENSMUSG00000067586	11.04	9.46
---	down	2.81	4.62E-02	chr17(+):89045457-89047197	UCSC	---	---	AK078720	---	---	8.43	6.94
Hs3st1	down	2.74	2.03E-02	chr5(-):40005174-40146714	UCSC	heparan sulfate (gluco	3-OST // D5Wsu110e	AF019385	15476	ENSMUSG00000051022	9.27	7.82
Gpr171	down	2.73	2.29E-02	chr3(-):58895802-58905744	UCSC	G protein-coupled rec	F730001G15Rik // H963	AK154964	229323	ENSMUSG00000050075	10.94	9.50
Zc3h12c	down	2.69	4.27E-02	chr9(-):51923490-51934770	UCSC	zinc finger CCCH type	C230027N18Rik	AK220416	244871	ENSMUSG00000035164	9.93	8.50
Rab30	down	2.59	4.56E-02	chr7(+):99890216-99985626	UCSC	RAB30, member RAS	5033421K01Rik	AK142206	75985	ENSMUSG00000030643	9.90	8.53
---	down	2.43	2.04E-03	chr10(-):32358637-32359292	UCSC	---	---	AK039386	---	---	6.46	5.18
Ccr6	down	2.37	2.40E-02	chr17(+):8429077-8449992	UCSC	chemokine (C-C motif	Cmkbr6	AB016031	12458	ENSMUSG00000040899	9.11	7.86
Pkib	down	2.33	4.00E-02	chr10(+):57351781-57460918	UCSC	protein kinase inhibito	PKIbeta // Prkacn2	AK156950	18768	ENSMUSG00000019876	9.01	7.79
Serpinb6b	down	2.32	3.18E-03	chr13(+):33057312-33070931	UCSC	serine (or cysteine) pe	NK13 // ovalbumin // Spi12	AK078753	20708	ENSMUSG00000042842	9.39	8.18
2310074N15Rik	down	2.30	1.49E-02	chr5(+):23953724-23954302	UCSC	RIKEN cDNA 231007	---	AK010155	---	---	7.55	6.35
Olfr313	down	2.30	2.33E-02	chr11(+):58630430-58631503	UCSC	olfactory receptor 313	GA_x6K02T2NKPP-590035-589	BC120742	258529	ENSMUSG00000070438	7.17	5.97
5730405O12Rik	down	2.25	4.76E-02	chr11(-):5655010-5658302	UCSC	RIKEN cDNA 573040	---	AK053288	---	---	7.09	5.92
9530001D17Rik	down	2.23	1.06E-03	chr13(+):54843313-54843693	UCSC	RIKEN cDNA 953000	---	AK020532	---	---	6.87	5.71
---	down	2.20	3.54E-02	chr14(-):121909725-121918335	UCSC	---	---	AK029385	---	---	8.51	7.37
---	down	2.19	9.94E-03	chr18(-):72333717-72334936	UCSC	---	---	AK043078	---	---	6.92	5.79
Icos	down	2.16	1.85E-02	chr1(+):61034761-61057158	UCSC	inducible T-cell co-stin	---	AK030827	54167	ENSMUSG00000026009	10.89	9.79
Cxcr5	down	2.13	4.40E-02	chr9(-):44319871-44369961	UCSC	chemochine (C-X-C m	Blr1 // CXCR-5 // Gpcr6	AK133064	12145	ENSMUSG00000047880	10.77	9.68
---	down	2.13	1.83E-04	chr3(+):58902452-58903248	UCSC	---	---	AK155223	---	---	7.51	6.42
Cd83	down	2.12	3.42E-02	chr13(+):43880551-43898501	UCSC	CD83 antigen	---	AK075888	12522	ENSMUSG00000015396	10.66	9.58
Olfr33	down	2.11	1.81E-02	chr7(-):109861969-109862925	UCSC	olfactory receptor 33	GA_x6K02T2PBJ9-5431102-543	BC104111	18332	ENSMUSG00000066273	6.41	5.33
Cabc1	down	2.10	1.71E-02	chr1(-):182095369-182126099	UCSC	chaperone, ABC1 acti	4632432J16Rik // mKIAA0451	AK014605	67426	ENSMUSG00000026489	9.82	8.75
Myc	down	2.08	3.89E-02	chr15(+):61816913-61821907	UCSC	myelocytomatosis onc	bHLHe39 // c-myc // Myc2 // Niar	AK145084	17869	ENSMUSG00000022346	11.87	10.81
Hsph1	down	2.06	3.80E-02	chr5(-):150416862-150438871	UCSC	heat shock 105kDa/11	hsp-E7l // Hsp105 // HSP110	AK083179	15505	ENSMUSG00000029657	9.38	8.33
Olfr1166	down	2.05	2.34E-02	chr2(-):87963521-87965150	UCSC	olfactory receptor 116	GA_x6K02T2Q125-49616865-49	BC051250	258644	ENSMUSG00000075135	6.50	5.46
Rln3	down	2.04	4.58E-02	chr8(-):86566966-86568878	UCSC	relaxin 3	M3	AB076565	212108	ENSMUSG00000045232	9.56	8.53
---	down	2.02	1.85E-02	chr13(+):118708308-118710328	UCSC	---	---	AK139282	---	---	6.67	5.65
---	down	1.99	3.40E-02	chr8(-):61200466-61204149	UCSC	---	---	AK148743	---	---	7.35	6.36
---	down	1.97	2.86E-02	chr6(+):105994916-105997435	UCSC	---	---	AK141062	---	---	6.75	5.77
Olfr1248	down	1.97	4.99E-02	chr2(-):89457325-89458405	UCSC	olfactory receptor 124	GA_x6K02T2Q125-51059648-51	BC150718	258787	ENSMUSG00000075080	6.68	5.71
Bcar3	down	1.96	3.94E-02	chr3(+):121997052-122233098	UCSC	breast cancer anti-estr	AND-34	AK015763	29815	ENSMUSG00000028121	10.17	9.20
5730408A14Rik	down	1.95	1.84E-02	chr1(-):177308984-177310808	UCSC	RIKEN cDNA 573040	---	AK017519	---	---	6.51	5.54
4833403J16Rik	down	1.94	4.82E-02	chr6(+):48705337-48706367	UCSC	RIKEN cDNA 483340	---	AK014653	---	---	8.70	7.74
Cxcl13	down	1.93	2.49E-02	chr5(+):96385943-96390087	UCSC	chemokine (C-X-C mo	ANGIE2 // BCA-1 // BLC // Scyb1	AK160241	55985	ENSMUSG00000023078	7.37	6.42
4930535E02Rik	down	1.93	1.66E-03	chr3(-):68563831-68565357	UCSC	RIKEN cDNA 493053	---	AK015977	---	---	7.80	6.85
Pxdn	down	1.92	5.58E-03	chr12(+):30622473-30702522	UCSC	peroxidasin homolog (	2310075M15Rik // mKIAA0230 //	AK122223	69675	ENSMUSG00000020674	7.70	6.75
Maf	down	1.91	1.88E-02	chr8(-):118225335-118228975	UCSC	avian musculoaponeu	2810401A20Rik // A230108G15F	AK033026	17132	ENSMUSG00000055435	7.49	6.56
---	down	1.90	2.59E-02	chrX(-):23952318-23954569	UCSC	---	---	AK157457	---	---	6.78	5.86
3110037C07Rik	down	1.90	3.36E-02	chr3(+):19211657-19213735	UCSC	RIKEN cDNA 311003	---	AK014131	---	---	7.75	6.82
Tnfrsf9	down	1.89	2.63E-02	chr4(+):150294297-150320204	UCSC	tumor necrosis factor	4-1BB // A930040I11Rik // Cd137	AK019885	21942	ENSMUSG00000028965	8.82	7.90
Btla	down	1.88	3.87E-02	chr16(+):45224447-45253003	UCSC	B and T lymphocyte a	---	AK041334	208154	ENSMUSG00000052013	9.90	8.99
Nop16	down	1.88	5.84E-04	chr13(-):54685552-54691436	UCSC	NOP16 nucleolar prote	D13Wsu177e	AK013251	28126	ENSMUSG00000025869	10.35	9.43
Angptl2	down	1.87	4.57E-02	chr2(+):33071480-33103234	UCSC	angiopoietin-like 2	Arp2	AK155464	26360	ENSMUSG00000004105	8.98	8.09
Actg2	down	1.86	3.74E-02	chr6(-):83462904-83486226	UCSC	actin, gamma 2, smoo	Act-4 // Act4 // ACTA3 // SMGA	BC002042	11468	ENSMUSG00000059430	6.85	5.95
---	down	1.86	3.66E-03	chr16(-):46154902-46155020	UCSC	---	---	AK188373	---	---	11.65	10.75
Rhox4g	down	1.85	4.98E-02	chrX(-):35061008-35065834	UCSC	reproductive homeobo	Rhox4.7	AJ972671	664608	ENSMUSG00000079628	8.48	7.59
4930504C09Rik	down	1.85	2.08E-02	chr15(+):69100961-69105150	UCSC	RIKEN cDNA 493050	---	AK015695	---	---	7.83	6.94
Ifna5	down	1.82	4.25E-02	chr4(+):88481429-88481998	UCSC	interferon alpha 5	Ifa5	BC120911	15968	ENSMUSG00000076440	7.12	6.25
3110031N09Rik	down	1.81	4.92E-02	chr5(-):69947796-69948121	UCSC	RIKEN cDNA 311003	---	AK014107	---	---	7.68	6.82
Tmem97	down	1.81	3.88E-02	chr11(-):78355320-78364249	UCSC	transmembrane protei	1810014L12Rik // D11Bhm182e	AK155107	69071	ENSMUSG00000037278	9.15	8.29
Fam43a	down	1.80	1.06E-02	chr16(+):30601567-30602810	UCSC	family with sequence s	---	BC026202	224093	ENSMUSG00000046546	9.44	8.59
---	down	1.80	1.09E-02	chr13(-):52182976-52192038	UCSC	---	---	AK029587	---	---	7.93	7.08
Gm10911	down	1.79	4.86E-02	chr7(-):96536854-96539833	UCSC	predicted gene 10911	---	AK085394	---	ENSMUSG00000078084	8.48	7.64
---	down	1.79	1.55E-02	chr10(+):36461152-36463155	UCSC	---	---	AK082216	---	---	6.24	5.40
---	down	1.79	2.76E-02	chr4(-):81191980-81192790	UCSC	---	---	AK047382	---	---	7.70	6.86
---	down	1.79	1.29E-02	chr18(-):46395138-46397350	UCSC	---	---	AK131923	---	---	8.60	7.76
Hspd1	down	1.79	4.22E-03	chr1(-):55134679-55144728	UCSC	heat shock protein 1 (	Hsp60	AK146831	15510	ENSMUSG00000025980	10.42	9.58
Rilpl2	down	1.78	2.36E-02	chr5(-):124913276-124928377	UCSC	Rab interacting lysoso	MGC:7036	AK133760	80291	ENSMUSG00000029401	10.30	9.47
Olfr987	down	1.78	3.18E-02	chr2(-):85171054-85172128	UCSC	olfactory receptor 987	GA_x6K02T2Q125-46808500-46	BC147166	257951	ENSMUSG00000075223	8.59	7.76
Gm16489	down	1.78	3.32E-02	chr17(+):51989564-51991838	UCSC	predicted gene 16489	---	BC026389	---	ENSMUSG00000078225	6.80	5.97
Fcrla	down	1.76	1.07E-02	chr1(-):172847706-172857714	UCSC	Fc receptor-like A	FCRL1 // Fcrx // FREB // Freb1 //	AK172370	98752	ENSMUSG00000038421	10.64	9.82
---	down	1.76	2.76E-02	chr3(+):8929332-8929974	UCSC	---	---	AK213834	---	---	7.05	6.23
Zcchc18	down	1.75	2.89E-02	chrX(+):133527715-133533011	UCSC	zinc finger, CCHC dor	1500031H04Rik // Sizn2	AK134856	66995	ENSMUSG00000031428	7.50	6.69
Gm10498	down	1.75	4.66E-02	chr17(-):44163201-44164348	UCSC	predicted gene 10498	---	AK136747	---	ENSMUSG00000073395	7.60	6.79
Rapgef5	down	1.75	3.56E-02	chr12(+):118754951-118998209	UCSC	Rap guanine nucleotid	D030051B22Rik // mKIAA0277 //	AK029995	217944	ENSMUSG00000041992	8.80	7.99
Bcl2a1b	down	1.74	4.96E-02	chr9(+):89094111-89102664	UCSC	B-cell leukemia/lymph	A1-b	BC028762	12045	---	10.02	9.23
Olfr836	down	1.74	2.78E-02	chr9(+):18925401-18926355	UCSC	olfactory receptor 836	GA_x6K02T2PVTD-12857805-12	BC106989	258557	ENSMUSG00000059303	6.27	5.47
5730447C08Rik	down	1.73	2.47E-02	chr2(-):13942605-13943023	UCSC	RIKEN cDNA 573044	---	AK017643	---	---	6.04	5.25
9530004P13Rik	down	1.72	3.18E-02	chr8(-):37710048-37711020	UCSC	RIKEN cDNA 953000	---	AK020544	---	---	6.86	6.08
Dcbld1	down	1.72	2.67E-02	chr10(+):51953424-52041183	UCSC	discoidin, CUB and LC	4631413K11Rik	BC026771	66686	ENSMUSG00000019891	7.33	6.54
Ptpn22	down	1.72	3.72E-02	chr3(+):103663717-103716175	UCSC	protein tyrosine phosp	70zpep // Ptpn8	AK153812	19260	ENSMUSG00000027843	11.01	10.22
H2-Eb2	down	1.72	8.68E-03	chr17(+):34462619-34477173	UCSC	histocompatibility 2, cl	A130038H09Rik // H-2Eb2 // Ia-5	AK137912	381091	ENSMUSG00000067341	9.92	9.14
Cyc1	down	1.72	1.49E-02	chr15(+):76173951-76176364	UCSC	cytochrome c-1	2610002H19Rik	AK011288	66445	ENSMUSG00000022551	10.28	9.49
Pa2g4	down	1.72	1.39E-02	chr10(-):127994822-128003068	UCSC	proliferation-associate	Ebp1 // Plfap	AK144645	18813	ENSMUSG00000025364	10.72	9.94
Dctd	down	1.71	7.12E-03	chr8(+):49195346-49227017	UCSC	dCMP deaminase	6030466N05Rik	AK077663	320685	ENSMUSG00000031562	9.74	8.97
Alpk2	down	1.71	3.01E-02	chr18(-):65425188-65509190	UCSC	alpha-kinase 2	Hak	AK132555	225638	ENSMUSG00000032845	7.43	6.66

Supplementary Table S1. List of the 997 Regulated Genes of AML mice treated with ABT-737(Fold-change ≥ 1.5; P-Value ≤ 0.05); 764 upregulated and 233 downregulated genes.

GEO Accession No.: GSE48601

Gene Symbol	Regulation	Fold-Change	P-Value	Gene Coordinates (hg19)	UCSC Link	Gene Name	Aliases and Synonyms	Representative Transcript ID	Entrez Gene ID	EnsEMBL ID	Intensity NRAS-BCL2	Intensity NRAS-BCL2 ABT-737
Tsc22d1	down	1.71	3.99E-02	chr14(+):76814768-76907569	UCSC	TSC22 domain family,	Egr5 // Tgfb1i4 // TSC-22	AK173322	21807	ENSMUSG00000022010	8.59	7.81
---	down	1.70	2.63E-02	chr10(+):116343825-116344080	UCSC	---	---	AK216866	---	---	6.36	5.60
Olfr1143	down	1.70	6.84E-03	chr2(+):87642536-87643734	UCSC	olfactory receptor 114	GA_x6K02T2Q125-49303473-49	BC140202	258290	ENSMUSG00000068815	6.66	5.89
Apex1	down	1.70	2.42E-02	chr14(+):51544653-51546813	UCSC	apurinic/apyrimidinic e	HAP1 // Ref-1	BC052401	11792	ENSMUSG00000035960	10.04	9.27
Rpf2	down	1.69	1.22E-02	chr10(-):39936828-39966846	UCSC	ribosome production fa	2810470K21Rik // Bxdc1	BC025093	67239	ENSMUSG00000038510	8.75	8.00
Cd3eap	down	1.69	2.83E-02	chr7(-):19942217-19944805	UCSC	CD3E antigen, epsilon	2610103M17Rik // Ase1 // PAF49	BC071199	70333	ENSMUSG00000047649	8.57	7.81
---	down	1.69	3.33E-02	chr7(+):126726521-126727849	UCSC	---	---	AK142536	---	---	6.08	5.32
Ahcy	down	1.69	7.64E-03	chr2(-):154885050-154900193	UCSC	S-adenosylhomocyste	CuBP // SAHH	BC086781	269378	ENSMUSG00000027597	10.16	9.40
Set	down	1.69	2.25E-02	chr2(+):29917372-29928089	UCSC	SET translocation	2610030F17Rik // 5730420M11R	AK172327	56086	ENSMUSG00000054766	9.40	8.64
---	down	1.69	3.11E-02	chr16(+):72159192-72160483	UCSC	---	---	AK081909	---	---	6.98	6.22
Bdh1	down	1.69	6.12E-03	chr16(+):31422380-31458986	UCSC	3-hydroxybutyrate deh	2310032J20Rik // Bdh	BC043683	71911	ENSMUSG00000046598	8.51	7.75
---	down	1.69	4.89E-02	chr15(+):100693467-100695147	UCSC	---	---	AK084403	---	---	6.30	5.54
Hoxa9	down	1.68	3.76E-04	chr6(-):52173099-52177369	UCSC	homeobox A9	D6a9 // Hox-1.7	AB005457	15405	ENSMUSG00000038227	7.62	6.88
Unc119b	down	1.68	4.65E-02	chr5(-):115572572-115584985	UCSC	unc-119 homolog B (C	---	AK082614	106840	ENSMUSG00000046562	9.01	8.26
---	down	1.68	1.97E-02	chr15(-):36067976-36070141	UCSC	---	---	AK158239	---	---	7.07	6.32
Frmd7	down	1.67	5.00E-02	chrX(-):48245822-48248799	UCSC	FERM domain contain	EG665849 // LOC385354	AK032347	---	ENSMUSG00000036131	6.60	5.86
---	down	1.66	3.30E-02	chr8(-):17151623-17155670	UCSC	---	---	AK148894	---	---	9.54	8.81
Ruvbl1	down	1.66	1.69E-02	chr6(+):88415424-88447566	UCSC	RuvB-like protein 1	2510009G06Rik // Pontin52 // Tip	AK146374	56505	ENSMUSG00000030079	9.58	8.85
Cct6a	down	1.66	2.61E-02	chr5(+):130297889-130300376	UCSC	chaperonin containing	Cct6 // Cctz-1 // chaperoninconta	AK200859	12466	ENSMUSG00000029447	10.97	10.25
Pcgf6	down	1.66	2.09E-02	chr19(-):47108109-47125398	UCSC	polycomb group ring fi	4933407A11Rik // MBLR // Mel18	AK155067	71041	ENSMUSG00000025050	9.75	9.01
---	down	1.66	2.40E-02	chr17(+):75643757-75645635	UCSC	---	---	AK036790	---	---	6.40	5.67
B3gnt5	down	1.66	1.33E-02	chr16(+):19760299-19772548	UCSC	UDP-GlcNAc:betaGal	---	AK083839	108105	ENSMUSG00000022686	10.24	9.50
Dkc1	down	1.65	8.95E-04	chrX(+):72341405-72355114	UCSC	dyskeratosis congenita	---	AK167973	245474	ENSMUSG00000031403	9.38	8.66
---	down	1.65	2.79E-02	chr9(+):119768969-119770373	UCSC	---	---	AK145378	---	---	7.15	6.43
---	down	1.65	4.00E-02	chr8(+):11637151-11638324	UCSC	---	---	AK085930	---	---	7.14	6.42
Snrpd2	down	1.65	4.01E-02	chr7(+):19735187-19738076	UCSC	small nuclear ribonucl	1810009A06Rik // SMD2	BC043014	107686	ENSMUSG00000040824	10.07	9.34
1700047O18Rik	down	1.65	1.21E-02	chr7(+):13366209-13366951	UCSC	RIKEN cDNA 1700047	---	AK006720	---	---	7.28	6.55
Pole4	down	1.65	1.36E-02	chr6(-):82571851-82602871	UCSC	polymerase (DNA-dire	2400007P05Rik // 5830430F06R	AK145365	66979	ENSMUSG00000030042	9.00	8.28
Cd38	down	1.65	1.27E-02	chr5(+):44260048-44303613	UCSC	CD38 antigen	Cd38-rs1	AK038439	12494	ENSMUSG00000029084	11.86	11.14
Ccdc112	down	1.65	1.03E-02	chr18(-):46441819-46442848	UCSC	coiled-coil domain cor	8430438M01Rik	AK018477	240261	ENSMUSG00000079668	6.33	5.60
---	down	1.65	2.56E-02	chr14(-):40106542-40110301	UCSC	---	---	AK049684	---	---	6.68	5.96
Mcm5	down	1.64	2.31E-02	chr8(+):77633427-77652004	UCSC	minichromosome main	Cdc46 // mCD46 // Mcmd5	AK033196	17218	ENSMUSG00000005410	10.78	10.07
Fam185a	down	1.64	1.98E-02	chr5(+):20930776-20987942	UCSC	family with sequence s	---	AK030922	330050	ENSMUSG00000047221	7.98	7.27
A730015C16Rik	down	1.64	3.57E-02	chr4(-):108520004-108521224	UCSC	RIKEN cDNA A730015	---	AK042682	---	---	7.77	7.06
Tomm5	down	1.64	3.89E-02	chr4(-):45118087-45120981	UCSC	translocase of outer m	1110019J04Rik	AK003822	68512	ENSMUSG00000078713	10.06	9.35
Cct3	down	1.64	1.20E-02	chr3(+):88101044-88125688	UCSC	chaperonin containing	Cctg // Tcp1-rs3 // TriC-P5	AK146360	12462	ENSMUSG00000001416	10.01	9.29
Gm2447	down	1.64	2.01E-05	chr3(+):52543645-52580576	UCSC	predicted gene 2447	---	AK040707	100039832	---	8.09	7.38
Gdf5	down	1.64	2.22E-02	chr2(-):155767279-155770791	UCSC	growth differentiation f	bp // brp // cartilage-derivedmorp	AB259648	14563	ENSMUSG00000038259	7.38	6.66
C030024C20Rik	down	1.64	2.20E-02	chr16(-):38533200-38533735	UCSC	RIKEN cDNA C03002	---	AK021101	---	---	7.10	6.38
---	down	1.64	2.01E-02	chr13(-):32792703-32794504	UCSC	---	---	AK033351	---	---	7.37	6.65
4930511J24Rik	down	1.64	2.54E-03	chr12(+):111149993-111151728	UCSC	RIKEN cDNA 493051	---	AK015759	---	---	7.20	6.48
Chordc1	down	1.63	4.23E-02	chr9(+):18096710-18119259	UCSC	cysteine and histidine-	1110001O09Rik // Chp-1 // morg	AK132696	66917	ENSMUSG00000001774	9.86	9.16
Tas2r102	down	1.63	7.20E-04	chr6(+):132712148-132713202	UCSC	taste receptor, type 2,	mGR02 // mt2r51 // STC9-7 // Ta	BC165964	387339	ENSMUSG00000056901	7.08	6.38
Gm10069	down	1.63	5.08E-03	chr6(+):128388773-128453298	UCSC	predicted gene 10069	---	BC091771	---	ENSMUSG00000059659	7.37	6.67
Ptprcap	down	1.63	8.20E-03	chr19(+):4154648-4156713	UCSC	protein tyrosine phosp	CD-45-AP // LSM-1	AK088334	19265	ENSMUSG00000045826	10.55	9.84
Zfp36l1	down	1.63	4.94E-02	chr12(-):81208747-81214001	UCSC	zinc finger protein 36,	Brf1 // cMG1 // D530020L18Rik //	AK051035	12192	ENSMUSG00000021127	10.76	10.05
Trmt61a	down	1.63	2.49E-02	chr12(+):112916344-112922113	UCSC	tRNA methyltransferas	6720458F09Rik	AK032824	328162	ENSMUSG00000060950	8.40	7.69
---	down	1.63	2.25E-02	chr12(+):7394768-7396438	UCSC	---	---	AK133145	---	---	6.55	5.85
Olfr157	down	1.62	1.70E-02	chr4(-):43847693-43849386	UCSC	olfactory receptor 157	GA_x6K02T2N78B-16110014-16	BC137912	100040268	ENSMUSG00000059101	6.81	6.11
Psat1	down	1.62	2.01E-02	chr19(-):15979617-15999550	UCSC	phosphoserine aminot	D8Ertd814e // EPIP // PSA	AK032487	107272	ENSMUSG00000024640	10.25	9.56
1700019N12Rik	down	1.62	1.62E-02	chr19(+):6996675-6997479	UCSC	RIKEN cDNA 1700019	A430107B04Rik	AK020779	67077	ENSMUSG00000050623	6.70	6.01
Olfr173	down	1.62	8.06E-03	chr16(-):58796575-58797738	UCSC	olfactory receptor 173	GA_x54KRFPKG5P-54960233-5	BC137837	259002	ENSMUSG00000049362	6.45	5.75
C1qbp	down	1.62	4.82E-02	chr11(-):70791309-70796518	UCSC	complement compone	D11Wsu182e // HABP1 // P32	AK010746	12261	ENSMUSG00000018446	10.02	9.32
4930588G05Rik	down	1.62	8.50E-03	chr10(-):104961096-104963416	UCSC	RIKEN cDNA 4930588	---	AK019832	---	---	6.99	6.30
---	down	1.61	3.14E-02	chr8(-):120313239-120315411	UCSC	---	---	AK038009	---	---	7.05	6.36
Sprr2k	down	1.61	1.30E-02	chr3(+):92236518-92237673	UCSC	small proline-rich prote	---	BC116868	20765	ENSMUSG00000054215	6.24	5.55
Ppid	down	1.61	1.29E-02	chr3(+):79395262-79407571	UCSC	peptidylprolyl isomera	4930564J03Rik // cyclophilin40 //	AK151091	67738	ENSMUSG00000027804	7.63	6.94
---	down	1.61	1.83E-02	chr14(-):122335859-122338388	UCSC	---	---	AK154231	---	---	8.57	7.89
Gpr18	down	1.61	3.94E-02	chr14(-):122310475-122315069	UCSC	G protein-coupled rece	---	AK157029	110168	ENSMUSG00000050350	10.59	9.89
---	down	1.61	3.49E-02	chr11(+):32590106-32591943	UCSC	---	---	AK084253	---	---	7.07	6.38
---	down	1.60	9.98E-04	chr9(-):29503663-29505598	UCSC	---	---	AK159021	---	---	7.16	6.48
Gadd45gip1	down	1.60	7.10E-03	chr8(+):87356175-87359381	UCSC	growth arrest and DNA	2310040G17Rik // Crif1	AK028227	102060	ENSMUSG00000033751	9.42	8.74
Cdca7	down	1.60	3.60E-02	chr2(+):72314265-72324947	UCSC	cell division cycle asso	2310021G01Rik // JPO1	AK028671	66953	ENSMUSG00000055612	8.14	7.46
Hspe1	down	1.60	2.53E-02	chr1(+):55145161-55148150	UCSC	heat shock protein 1 (H	Hsp10 // mitochondrialchaperoni	AK088121	15528	ENSMUSG00000073676	9.83	9.14
Prmt5	down	1.60	1.55E-02	chr14(-):55126016-55136308	UCSC	protein arginine N-met	Jak-bindingprotein1 // Jbp1 // Skb	AK076346	27374	ENSMUSG00000023110	10.41	9.73
---	down	1.60	4.17E-02	chr14(+):124366485-124368273	UCSC	---	---	AK089847	---	---	7.30	6.62
2310044G17Rik	down	1.60	3.14E-02	chr12(+):88287992-88306312	UCSC	RIKEN cDNA 231004	mKIAA1737	AK122546	217732	ENSMUSG00000034157	9.44	8.76
Nob1	down	1.59	5.64E-03	chr8(-):109936389-109948953	UCSC	NIN1/RPN12 binding p	1700021I09Rik // ART-4 // Nob1p	BC103793	67619	ENSMUSG00000003848	9.85	9.18
---	down	1.59	1.56E-02	chr5(-):65821346-65822819	UCSC	---	---	AK140061	---	---	6.73	6.06
Cct6a	down	1.59	3.05E-02	chr5(+):130293391-130297434	UCSC	chaperonin containing	Cct6 // Cctz-1 // chaperoninconta	AK216762	12466	ENSMUSG00000029447	9.40	8.73
Fam92a	down	1.59	2.30E-02	chr4(-):12080870-12099145	UCSC	family with sequence s	6720467C03Rik	AK088705	68099	ENSMUSG00000028218	7.90	7.23
C130079B09Rik	down	1.59	3.87E-02	chr15(-):73231193-73233604	UCSC	RIKEN cDNA C13007	---	AK048576	---	---	6.96	6.29
---	down	1.59	2.01E-02	chr11(-):94481753-94483250	UCSC	---	---	AK076819	---	---	6.58	5.91
Impdh2	down	1.58	8.28E-03	chr9(+):108462766-108467926	UCSC	inosine 5'-phosphate d	IMPdehydrogenasetypeII	AK169129	23918	ENSMUSG00000062867	9.76	9.11
Pus3	down	1.58	3.76E-02	chr9(+):35366177-35374768	UCSC	pseudouridine synthas	2610020J05Rik // 5730412F04R	AK030639	67049	ENSMUSG00000032103	8.56	7.90
Mavs	down	1.58	1.66E-02	chr2(+):131059797-131073758	UCSC	mitochondrial antiviral	D430028G21Rik // IPS-1	AK153748	228607	ENSMUSG00000037523	9.43	8.77
Pola2	down	1.58	3.33E-02	chr19(-):5940548-5964204	UCSC	polymerase (DNA dire	---	AK133832	18969	ENSMUSG00000024833	10.10	9.44
BC048355	down	1.58	3.64E-02	chr17(+):46633717-46636572	UCSC	cDNA sequence BC04	c-Myc-responsive // MGC:54855	BC082791	381101	ENSMUSG00000040658	8.65	7.99
---	down	1.58	1.41E-02	chr11(+):86926583-86927836	UCSC	---	---	AK053454	---	---	9.55	8.89
---	down	1.57	1.38E-02	chr7(-):108725484-108727277	UCSC	---	---	AK041306	---	---	8.37	7.73
---	down	1.57	3.36E-02	chr7(-):73759984-73764034	UCSC	---	---	AK144264	---	---	8.67	8.01
Prmt1	down	1.57	6.39E-04	chr7(-):52231359-52241738	UCSC	protein arginine N-met	6720434D09Rik // Hrmt1l2	AK146927	15469	ENSMUSG00000052429	9.71	9.06
Egr2	down	1.57	3.82E-02	chr10(+):67000616-67004935	UCSC	early growth response	Egr-2 // Krox-20 // Krox20 // NGF	AK155585	13654	ENSMUSG00000037868	9.68	9.04
Phgdh	down	1.57	6.00E-03	chr3(-):98117093-98143848	UCSC	3-phosphoglycerate d	3-PGDH // 3PGDH // A10 // PGA	AK169684	236539	ENSMUSG00000053398	9.95	9.30

Supplementary Table S1. List of the 997 Regulated Genes of AML mice treated with ABT-737(Fold-change ≥ 1.5; P-Value ≤ 0.05); 764 upregulated and 233 downregulated genes.

GEO Accession No.: GSE48601

Gene Symbol	Regulation	Fold-Change	P-Value	Gene Coordinates (hg19)	UCSC Link	Gene Name	Aliases and Synonyms	Representative Transcript ID	Entrez Gene ID	EnsEMBL ID	Intensity NRAS-BCL2	Intensity NRAS-BCL2 ABT-737
Olfr1414	down	1.57	2.08E-03	chr1(-):94407625-94408640	UCSC	olfactory receptor 141	GA_x6K02T2R7CC-81245243-8	BC120830	259041	ENSMUSG00000042849	6.91	6.26
Dis3	down	1.57	3.85E-02	chr14(-):99475853-99498985	UCSC	DIS3 mitotic control ho	2810028N01Rik	AK038313	72662	ENSMUSG00000033166	9.29	8.64
Olfr429	down	1.57	1.58E-02	chr1(+):176019169-176020111	UCSC	olfactory receptor 429	GA_x6K02T2P20D-21090094-21	BC127973	258717	ENSMUSG00000049528	7.30	6.65
---	down	1.57	1.23E-02	chr10(-):91618596-91621875	UCSC	---	---	AK051318	---	---	7.62	6.97
---	down	1.56	1.17E-02	chr7(-):22558890-22560240	UCSC	---	---	AK157641	---	---	7.59	6.95
Ctps	down	1.56	4.30E-02	chr4(-):120212471-120242882	UCSC	cytidine 5'-triphosphat	---	AK146476	51797	ENSMUSG00000028633	8.30	7.66
---	down	1.56	1.67E-02	chr3(-):20118504-20119207	UCSC	---	---	AK136713	---	---	6.61	5.97
Rexo4	down	1.56	2.62E-02	chr2(-):26809086-26819838	UCSC	REX4, RNA exonucle	XPMC2H	BC060147	227656	ENSMUSG00000052406	9.45	8.81
---	down	1.56	5.82E-03	chr17(-):93989959-93994457	UCSC	---	---	AK156535	---	---	6.98	6.34
Hmgn1	down	1.56	2.37E-02	chr16(-):96342225-96349337	UCSC	high mobility group nu	HMG-14 // Hmg14	AK010763	15312	ENSMUSG00000040681	9.47	8.82
---	down	1.56	3.90E-02	chr12(-):40778044-40781730	UCSC	---	---	AK143806	---	---	6.19	5.55
Cenpw	down	1.55	1.54E-03	chr10(-):29914390-29920343	UCSC	centromere protein W	2610036L11Rik	BC050071	66311	ENSMUSG00000075266	7.20	6.58
Slc25a4	down	1.55	2.27E-02	chr8(-):47292528-47296387	UCSC	solute carrier family 25	adeninenucleotidetranslocase-1	AK078077	11739	ENSMUSG00000031633	10.10	9.47
---	down	1.55	2.91E-02	chr6(-):12072441-12075162	UCSC	---	---	AK037624	---	---	6.60	5.96
Rpl9	down	1.55	1.06E-02	chr5(-):65779602-65782810	UCSC	ribosomal protein L9	---	BC013165	20005	ENSMUSG00000047215	9.88	9.25
Smyd2	down	1.55	2.82E-02	chr1(-):191704373-191746172	UCSC	SET and MYND doma	1110020E07Rik // KMT3C // Zmy	AK150857	226830	ENSMUSG00000026603	8.94	8.31
Uck2	down	1.55	2.95E-02	chr1(-):169156219-169215264	UCSC	uridine-cytidine kinase	TSA903 // Umpk	AF236636	80914	ENSMUSG00000026558	11.31	10.67
Olfr102	down	1.55	4.48E-02	chr17(-):37450356-37451382	UCSC	olfactory receptor 102	GA_x6K02T2PSCP-1775063-17	BC139115	258218	ENSMUSG00000049234	7.09	6.46
---	down	1.54	1.86E-02	chrM(+):9459-9804	UCSC	---	---	AK139029	---	---	9.03	8.41
---	down	1.54	1.86E-02	chr9(-):9224948-9226139	UCSC	---	---	AK087344	---	---	6.95	6.33
Nop2	down	1.54	2.50E-02	chr6(+):125081927-125094770	UCSC	NOP2 nucleolar protei	120kDa // Nol1	AK079914	110109	ENSMUSG00000038279	9.02	8.40
Ly9	down	1.54	1.92E-03	chr1(-):173518763-173537541	UCSC	lymphocyte antigen 9	CD229 // Lgp100 // SLAMF3 // T	AK088815	17085	ENSMUSG00000004707	10.52	9.90
Stip1	down	1.54	1.12E-02	chr19(-):7095192-7114458	UCSC	stress-induced phosph	Hop // Hsp70/Hsp90organizingpr	AK088494	20867	ENSMUSG00000024966	10.83	10.21
4930515G13Rik	down	1.54	1.76E-02	chr17(-):21937511-21938807	UCSC	RIKEN cDNA 4930515	---	AK015795	75098	ENSMUSG00000049202	8.01	7.39
4930428D20Rik	down	1.54	4.89E-02	chr16(-):69796386-69800627	UCSC	RIKEN cDNA 4930428	---	AK019586	---	---	7.16	6.54
Yars2	down	1.54	3.40E-02	chr16(+):16303057-16309725	UCSC	tyrosyl-tRNA synthetas	2210023C10Rik	AK138504	70120	ENSMUSG00000022792	9.16	8.54
1110067D22Rik	down	1.54	1.10E-02	chr11(-):20723358-20731239	UCSC	RIKEN cDNA 111006	---	AK156350	216551	ENSMUSG00000042363	9.26	8.64
Sms	down	1.53	4.72E-02	chrX(-):153881785-153930219	UCSC	spermine synthase	SpmST	AK166665	20603	ENSMUSG00000071708	9.30	8.69
---	down	1.53	2.98E-02	chrX(-):140317303-140319727	UCSC	---	---	AK045457	---	---	7.19	6.58
Fam60a	down	1.53	1.25E-02	chr6(-):148869588-148894966	UCSC	family with sequence s	Ptpcs1 // Tera	AK145384	56306	ENSMUSG00000039985	10.28	9.67
Mbd4	down	1.53	4.08E-02	chr6(-):115791217-115803383	UCSC	methyl-CpG binding d	Med1	AK161005	17193	ENSMUSG00000030322	8.76	8.15
B630006K09Rik	down	1.53	4.89E-02	chr6(+):41517478-41520684	UCSC	RIKEN cDNA B63000	---	AK037902	---	---	6.77	6.16
Mcm7	down	1.53	4.95E-02	chr5(-):138605817-138613651	UCSC	minichromosome mair	mCDC47 // Mcmd7	AK132748	17220	ENSMUSG00000029730	10.45	9.84
Gar1	down	1.53	2.52E-02	chr3(-):129527831-129534239	UCSC	GAR1 ribonucleoprote	C430047J18Rik // GAR1 // Nola1	BC048685	68147	ENSMUSG00000028010	8.67	8.05
---	down	1.53	9.68E-03	chr2(+):113543305-113545587	UCSC	---	---	AK085610	---	---	8.42	7.81
Mrrf	down	1.53	2.35E-02	chr2(+):35992173-36046169	UCSC	mitochondrial ribosom	2400002D02Rik	AK032371	67871	ENSMUSG00000026887	9.54	8.92
---	down	1.53	2.61E-02	chr19(-):42002733-42004477	UCSC	---	---	AK080328	---	---	7.19	6.57
Hells	down	1.53	3.95E-02	chr19(+):39005434-39042769	UCSC	helicase, lymphoid spe	E130115I21Rik // LSH // Lysh // I	BC090671	15201	ENSMUSG00000025001	8.38	7.77
Mc5r	down	1.53	3.18E-02	chr18(+):68497250-68499377	UCSC	melanocortin 5 recepto	---	U08354	17203	ENSMUSG00000007480	7.22	6.61
Dmxl1	down	1.53	2.35E-02	chr18(+):49992651-50123908	UCSC	Dmx-like 1	C630007L23Rik	AY590892	240283	ENSMUSG00000037416	9.48	8.86
Olfr128	down	1.53	1.89E-02	chr17(+):38060483-38061500	UCSC	olfactory receptor 128	GA_x6K02T2PSCP-2374126-23	BC139087	383243	ENSMUSG00000059030	7.38	6.77
---	down	1.53	1.27E-02	chr13(+):53124287-53130459	UCSC	---	---	AK132507	---	---	7.25	6.64
Nhp2	down	1.53	3.20E-02	chr11(+):51433250-51437216	UCSC	NHP2 ribonucleoprote	2410130M07Rik // D11Ertd175e	AK019134	52530	ENSMUSG00000001056	10.32	9.70
Bfsp2	down	1.52	4.24E-02	chr9(-):103327255-103382658	UCSC	beaded filament struct	CP49	BC068172	107993	ENSMUSG00000032556	8.20	7.59
Mc1r	down	1.52	3.46E-02	chr8(+):125931005-125934522	UCSC	melanocortin 1 recepto	e // extensionrecessiveyellow // N	AK148437	17199	ENSMUSG00000074037	8.86	8.26
Slc7a6	down	1.52	1.56E-02	chr8(+):108692756-108722604	UCSC	solute carrier family 7	LAT-2	AK165629	330836	ENSMUSG00000031904	9.60	8.99
Isyna1	down	1.52	1.36E-02	chr8(+):73118380-73121187	UCSC	myo-inositol 1-phosph	1300017C10Rik	AF288525	71780	ENSMUSG00000019139	10.39	9.78
Rplp2	down	1.52	1.55E-02	chr7(+):148633542-148637484	UCSC	ribosomal protein, larg	2700049I22Rik	AK012402	67186	ENSMUSG00000025508	5.77	5.17
Ppat	down	1.52	4.10E-02	chr5(-):77342274-77380597	UCSC	phosphoribosyl pyroph	5730454C12Rik // MGC:38417	AK159859	231327	ENSMUSG00000029246	9.26	8.65
1110001D16Rik	down	1.52	4.44E-03	chr4(-):151306487-151306960	UCSC	RIKEN cDNA 111000	---	AK003212	---	---	7.90	7.30
Sf3a3	down	1.52	4.31E-02	chr4(+):124392060-124409704	UCSC	splicing factor 3a, sub	4930512K19Rik // 60kDa	AK030743	75062	ENSMUSG00000028902	10.34	9.74
Nop58	down	1.52	2.46E-02	chr1(+):59741849-59769036	UCSC	NOP58 ribonucleoprot	MSSP // Nol5 // SIKsimilarprotein	AK044216	55989	ENSMUSG00000026020	9.38	8.78
E2f1	down	1.52	3.06E-02	chr2(-):154385370-154395590	UCSC	E2F transcription facto	E2F-1	AK153968	13555	ENSMUSG00000027490	9.75	9.15
Eif1a	down	1.52	2.22E-05	chr18(+):46757357-46769867	UCSC	eukaryotic translation	Ef1a // Eftu // eIF-1A // Eif4c	AK019451	13664	ENSMUSG00000057561	9.92	9.32
Cenpm	down	1.52	3.68E-02	chr15(-):82064509-82075178	UCSC	centromere protein M	2610019I03Rik	AK017679	66570	ENSMUSG00000068101	9.45	8.84
Dlk1	down	1.52	3.58E-02	chr12(+):110691432-110701545	UCSC	delta-like 1 homolog (	Dlkl // FA1 // Peg9 // pG2 // pref-	EU434917	13386	ENSMUSG00000040856	7.88	7.28
Timd2	down	1.52	1.14E-02	chr11(-):46482462-46520566	UCSC	T-cell immunoglobulin	TIM-2 // Tim2	BC028829	171284	ENSMUSG00000040413	7.20	6.59
---	down	1.52	1.81E-02	chr11(+):95590074-95592261	UCSC	---	---	AK043141	---	---	7.34	6.74
Aasdhppt	down	1.51	8.88E-03	chr9(-):4294793-4309496	UCSC	aminoadipate-semialde	2010309J24Rik // 2810407B07R	AK029523	67618	ENSMUSG00000025894	8.80	8.20
---	down	1.51	4.01E-02	chr8(+):68175738-68178110	UCSC	---	---	AK086228	---	---	7.68	7.08
Rps3	down	1.51	4.76E-03	chr7(-):106626410-106632163	UCSC	ribosomal protein S3	D7Ertd795e	AK164077	27050	ENSMUSG00000030744	11.98	11.38
Wbscr22	down	1.51	1.83E-02	chr5(-):135528829-135540830	UCSC	Williams Beuren syndr	1110003N24Rik	AK002497	66138	ENSMUSG00000005378	10.15	9.55
Srm	down	1.51	1.00E-02	chr4(+):147965611-147968727	UCSC	spermidine synthase	SpdST // SpdSy	AK028359	20810	ENSMUSG00000006442	11.17	10.57
---	down	1.51	3.81E-02	chr3(-):141556649-141559349	UCSC	---	---	AK082979	---	---	6.86	6.27
Lbh	down	1.51	4.77E-02	chr17(+):73267645-73291282	UCSC	limb-bud and heart	1810009F10Rik // 6720416L16R	BC052470	77889	ENSMUSG00000024063	11.12	10.52
Gart	down	1.51	2.46E-02	chr16(-):91621649-91647199	UCSC	phosphoribosylglycina	Gaps // Prgs	AK146355	14450	ENSMUSG00000022962	9.79	9.20
Nip7	down	1.50	4.89E-02	chr8(+):109580777-109583145	UCSC	nuclear import 7 homo	1110017C15Rik // 6330509M23F	AK003739	66164	ENSMUSG00000031917	8.27	7.69
---	down	1.50	6.90E-03	chr7(-):141390192-141391945	UCSC	---	---	AK038353	---	---	6.96	6.37
---	down	1.50	4.81E-02	chr7(-):28620206-28622620	UCSC	---	---	AK042484	---	---	7.34	6.75
Fkbp4	down	1.50	3.91E-02	chr6(-):128379556-128388675	UCSC	FK506 binding protein	FKBP-52 // FKBP52	AK051433	14228	ENSMUSG00000030357	9.29	8.70
Wdr75	down	1.50	4.23E-02	chr1(+):45852294-45880481	UCSC	WD repeat domain 75	1300003A18Rik // 2410118I19Ri	AK004869	73674	ENSMUSG00000025995	10.15	9.56
---	down	1.50	3.68E-02	chr16(+):6576126-6578413	UCSC	---	---	AK078732	---	---	7.73	7.14
Gpr183	down	1.50	2.79E-02	chr14(-):122351773-122364417	UCSC	G protein-coupled rec	Ebi2	AK156005	321019	ENSMUSG00000051212	11.58	10.99