Figure S1. The figure shows 12 of the 13 intersected genes that didn't reach the statistical significance for survival analysis. Patients were divided into two groups based on the median expression value of each gene respectively. Overall survival analysis for patients with different expression levels of (A) PDZK1IP1, (B) MMP7, (C) CEACAM6, (D) CEACAM7, (E) KRT19, (F) LAMC2, (G) SPP1, (H) RAB25, (I) UBD, (J) DCDC2, (K) EPCAM and (L) MMP11. OS, overall survival; PDZK1IP1, PDZK1 Interacting Protein 1; MMP7, matrix metalloproteinase 7; CEACAM6, carcinoembryonic antigen related adhesion molecules 6; MUC1, mucin 1; CEACAM7, carcinoembryonic antigen related adhesion molecules 7; KRT19, keratin 19; LAMC2, laminin subunit gamma-2; SPP1, secreted phosphoprotein 1; RAB25, Ras Genes from Brain Protein 25; UBD, ubiquitin D; DCDC2, doublecortin domain containing 2; EPCAM, epithelial cell adhesion molecule; MMP11, matrix metalloproteinase 11.

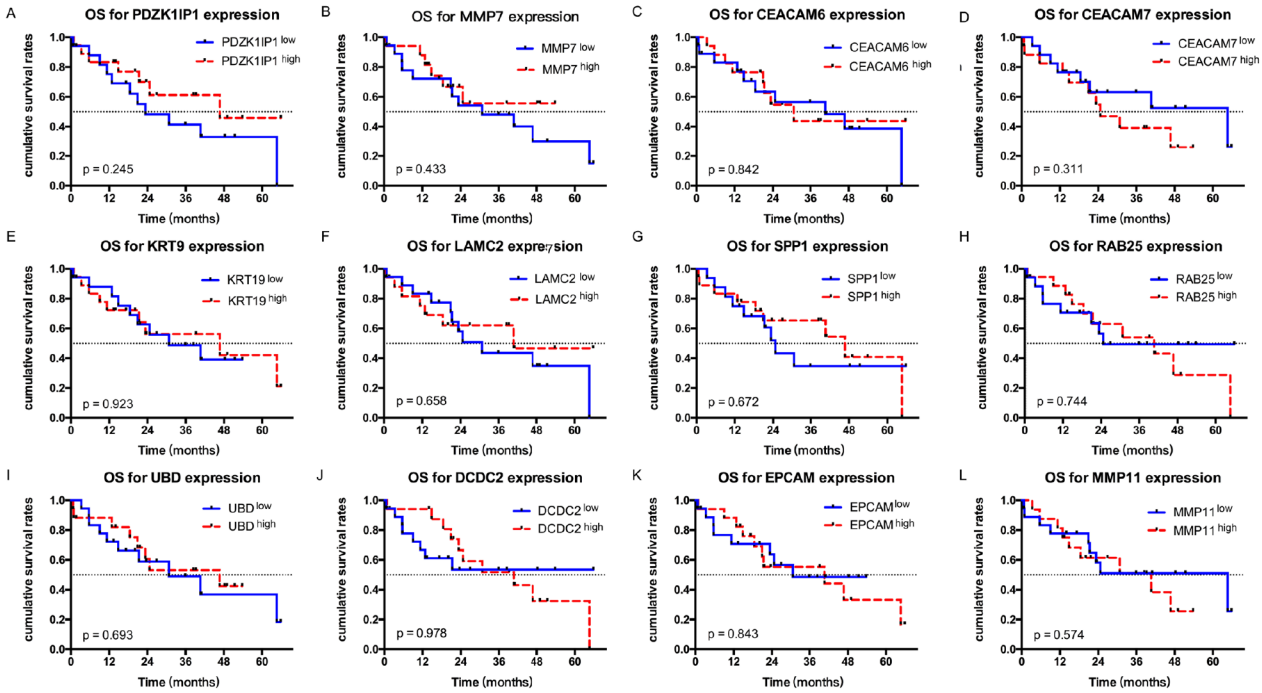

Table SI. PCR primers used in the present study.

Gene symbol	Forward primer	Reverse primer	Amplicon length (bp)
GAPDH	5'-GTCAGCCGCATCTTCTTTTG-3'	5'-TTAAAAGCAGCCCTGGTGAC-3'	132
MUC1	5'-GGCATTCGGGCTCCTTTCTT-3'	5'-TGGAGTGGTAGTCGATGCTAAG-3'	87

MUC1, mucin 1.

Table SII. List of dysregulated genes associated with cholangiocarcinoma identified by robust rank aggregation.

A, Upregulated genes
COL1A1, PDZK1IP1, MMP7, SPP1, CEACAM6, UBD, RAB25, MUC1, CEACAM7, SULF1, KRT7, KRT19, MMP11, FAP, DCDC2, EPCAM, COL1A2, VCAN, LAMC2
B, Downregulated genes
TAT, MT1M, MT1G, FBP1, BHMT, METTL7A, ADH1C, MT1H, ALDOB, MTTP, MT1X, APOC3, SEPP1, MT1E, OTC, ADH4, APOF, FOLH1, GSTA2, APOA1, CPS1, GBA3, SERPINC1, SLC22A1, HPD, HMGCS2, KMO, HSD17B13, SULT2A1, MBL2, MT1F, XDH, SLC27A5, PCK1, AHSG, CIDEB, SELENBP1, HSD17B6, DNASE1L3, F9, CYP4A11, GC, MT1A, CYP4F2, C8B, GLYAT, CREB3L3, HPR, INSIG1, GSTA1, SLC10A1, CYP3A4, HGFAC, AFM, RBP4, EPHX2, HAMP, PON3, HAO1, FMO5, CYP2A6, F12, SARDH, ADH1A, DCXR, UGT2B10, FTCD, HBB, SLC27A2, SLC7A2, HPX, CYP2C9, ARG1, DAK, HRG, F2, SERPIND1, ITIH4, RBP5, ABCG8, GCGR, ORM1, MAT1A, ALAS1, OIT3, BCHE, MLXIPL, CYB5A, ADH1B, APOH, KHK, C4BPA, SPP2, SLC2A2, UGT2B11, HP, ACOX2, SLCO1B1, CPB2, ANG, KNG1, AQP9, TM6SF2, SERPINF2, SLC39A5, CRYL1, ACSL1, AASS, CYP2C8, FETUB, ADH6, TTR, PLA2G12B, C6, GNMT, CTH, HRSP12, ITIH1, HAO2, PLG, CYP3A43, ABCB4, FST, PRG4, CYP8B1, CYP27A1, G6PC, ORM2, C8A, GADD45G

Table SIII. Dysregulated genes associated with cholangiocarcinoma identified by edgeR.package from The Cancer Genome Atlas.

A, Upregulated genes (n=769)

PNCK, AL590652.1, FEZF1, E2F8, KIF26B, AL161431.1, SPINK1, SPIB, RTKN2, ADRA2C, TESMIN, PFKP, MGAM2, KCNG1, DMP1, TMEM151A, EHF, CTNND2, FRAS1, OR2B6, COL22A1, CNGB1, MMP7, NKX2-5, PRKCG, DEPDC1B, ITIH5, IGF2BP3, AC091806.1, PADI3, PKP1, DIRAS1, KCNF1, AC008667.3, AC008514.1, AC015921.1, AC008011.2, PDE1C, AC080037.1, CEACAM6, HIST1H4E, NXNL2, FSCN2, UNC5A, FER1L5, AFAP1-AS1, SLC13A1, HMGB2P1, IGSF3, AC245884.9, PROM2, C6orf223, HOXA13, FIBCD1, AC107959.3, B4GALNT4, AL589765.6, BCAN, AC133963.1, AL445649.1, ITGA3, CLDN4, ENTPD3, AL031123.1, COL9A2, LINC00460, MAFA-AS1, HRK, AC078909.2, HIST1H1PS1, ZIC2, SP6, BOLA2P3, SYNGR3, ANLN, BIRC5, LINC01117, NPM1P9, PLK1, AL137026.2, RNF223, AARD, HAGHL, FOXJ1, ITGB4, CACNA1E, SPATA17, LINC01121, SPINT1-AS1, SMIM22, AP005233.2, TEX19, C5orf38, CABP1, PLEKHB1, MUC16, LINC00941, CREG2, CASC8, SLC2A1-AS1, SLCO4A1-AS1, SYT13, FRMD5, C17orf99, CHMP1B2P, RASAL1, TFCP2L1, LINC00323, DLX6-AS1, SEMA3E, UGT1A10, TMC2, LINC00511, ASCL5, AL136964.1, PLA2G4E, TRIM72, MUC1, ARFGEF3, AC090192.2, LINC02154, PTHLH, PCDHB8, KIAA1324, BDKRB1, PRKG2, C12orf75, AC116158.1, FAXC, TNFSF15, KIF18B, AICDA, TDRD5, AL359397.1, PAX9, MYEF2, BARX2, SLC4A3, RUNDC3A-AS1, PTPN5, AP000911.1, TNNI3, AC128688.2, CTSV, IGSF11, PRSS21, AL049555.1, HTR3A, OXTR, CDC25C, POF1B, RN7SL8P, LINC01116, FOLR1, CDX2, TMEM125, HOXB13, CHRNB2, MNX1-AS1, PQLC2L, VTCN1, ISL2, AP000344.2, CST1, CAPN9, CACNG4, MYBL2, NPHS1, ZP1, SNORD116-4, PSG4, AL022326.2, CTXN1, LIPH, ARHGEF38, PAEP, OTX1, KISS1R, APLP1, AC147651.1, KRT15, DLX4, SEPT3, KIAA1549L, KRT17, RBBP8NL, ELOVL7, LY6G6C, PLXNB3, FOXCUT, DLX6, CDH17, MROH3P, AURKB, IL22RA2, WNT3A, AL359694.2, CAPN6, TNFAIP6, RNF182, AL445070.1, LINC01342, HIST3H2A, TRIM40, EPS8L1, PRSS22, AP001626.1, PITX1, PRR36, HOXB8, LINC02182, AC021151.1, LINC00113, NTM, VANGL2, FA2H, BX470102.1, MTND2P40, LINC02041, AC009014.1, VSIG1, IL1A, AC108860.2, C5orf67, UNC5B-AS1, SPEF1, ITGB6, SIX2, LEF1-AS1, KIF4A, SPATA12, MNX1-AS2, HOXA10, EPS8L3, DUOXA1, TNNI2, C5orf46, UCA1, FER1L4, CD177, NLRP3P1, AC004080.1, TMPRSS4, XKR5, NKX2-8, NT5DC4, TMPRSS13, AC010931.2, ETV4, AC023302.1, SPP1, AL021807.1, TNNT2, AGGF1P2, FAM131C, HOXA-AS3, DAND5, CA9, AC093458.1, FAR2P1, DPYSL5, FAM81B, MATN3, ROR1-AS1, KIF2C, SEZ6L2, OR2I1P, NEFL, AL596223.2, AC103702.2, IQANK1, GNG4, GPRC5A, GCM1, PPP2R2C, TGM3, LINC02560, AP002957.1, TMEM72, AC040174.1, DUSP5P1, SLC9A2, NEURL3, CDK5R2, C19orf81, CRYBG2, TINAG, CENPA, LINC02188, WIF1, CDH6, CALB2, CDCA7, RHOV, GPRIN2, CPA4, MELK, SLC52A3, SFN, AACSP1, AC068491.4, SSTR3, KCNH6, KLC3, OVOL2, PLPP2, C12orf80, ASPHD1, AL355102.4, CDC20, RASGEF1A, DRP2, DQX1, LINC01659, AC140479.2, RAB25, AL133215.2, PPP1R14D, TUBB3, SLC7A11, DMBX1, SHISA8, NRSN1, AL049629.1, ITGA2, S100A6, UBD, S100A1, GRIN2A, SMIM23, FZD10, FEZF1-AS1, KCNK12, ULBP1, EVX1, SLC35F3, DCDC2, IGFL2, TMEM132A, LINC00494, KCCAT198, HAVCR1, ABCA12, ZDHHC8P1, BAIAP2L2, ZG16B, PI3, E2F7, BUB1, TNFRSF13C, SLC6A14, PBK, NUF2, HIST1H2AI, SLC30A2, SCGB1D2, MDFI, AP3B2, IBSP, KRT81, SKA1, ALDH3B2, MMP1, TRIP13, AC105219.2, AC023115.1, NEB, TFAP2A-AS1, AC148476.1, AC069120.3, AC116025.2, MMP12, ONECUT3, GUCA2A, PIFO, SLC2A1, EPCAM, HMGA2, AC084346.2, C1QL4, HAGLR, LYPD1, LINC01559, MIR4697HG, PCSK1N, LAMP5, DUOX1, LYPD6, DEPDC1, MMP11, EEF1A2, AC245100.1, BEST3, 10-Mar, CAPN8, AL365181.2, CDH3, AL356234.1, SPEG, LYPD6B, SCTR, ZNF695, SKA3, NXPH4, IQGAP3, OR7E91P, MST1R, PDZK1IP1, CHGB, MFSD6L, AC005841.1, DIAPH3, HES2, INAVA, LIPM, KCNH3, SGPP2, CGB7, TMEM178B, ARMC3, EVX1-AS, GOLGA7B, BX322234.2, KREMEN2, UBASH3B, AC034213.1, SPAG17, NKAIN1, CNNM1, PDIA2, CCDC74B, SHCBP1, HIST2H2BC, CRHR1, DSC3, TBX4, ZIC5, B3GNT3, SH2D3A, CKMT1B, KRT80, RN7SKP239, ZNF365, AC244034.2, AC126768.2, FAM83B, RAET1K, HTR1F, AC008691.1, MYO3A, AC007326.1, PIMREG, DMKN, SMKR1, AGGF1P1, BLACAT1, EPN3, AC097478.1, GPR27, OLFM4, SEMA6A-AS2, PSORS1C1, KCNK9, NETO1, IL17REL, KLK13, ANKFN1, AC138904.1, UBE2C, NQO1, DMBT1, SRRM3, B4GALNT3, IFNL3P1, AC233280.2, AC125616.1, NLRP2, AC008875.1, CCNB2, LINC02313, HOXC9, TTC39A, TRIM17, PRC1, CSMD2, AP000997.3, C6orf222, MELTF, CEACAM5, GRIN1, STEAP1B, NECTIN4, CDT1, 4-Mar, GPRIN1, UPK3A, MCOLN3, CEP55, TMEM190, LEMD1, KRT20, GRM5, SPDEF, LINC01829, AMH, KCNG3, CCDC33, TMC5, CTSE, LINC01615, TFAP2C, AL021407.1, PLEKHG4B, CST6, TOP2A, GRM5-AS1, GPR35, AL021391.1, LINC01436, EGFL6, NLGN1, LINC02441, LINC00942, SPINT1, SHISA9, AL109976.1, TMPRSS7, ANKRD2, RAD54L, IRX2, PLA2G4F, CDC45, AC009097.2, UNC13A, S100A2, LINC01833, MIR559, SYT8, AL451069.1, COL18A1-AS1, AC105411.1, CYP2W1, DEFB131E, C19orf33, TERT, LINC01012, SLC26A9, STRA6, AL033527.3, AC026368.1, CEACAM7, AC107959.2, REG1A, AC011352.3, TFAP2A, AC060766.6, BUB1B, AC128688.1, AC099518.2, ALOX12B, AL138760.1, DKK1, LINC00707, COX6B2, FDCSP, DLGAP5, DPEP1, AC026992.2, AC141928.1, VSTM5, FABP6, COL17A1, ESRP1, PRSS16, KRT19, AQP5, TMEM163, CLVS1, HOXC-AS2, TTYH1, AC004231.1, AC003965.2, LINC02332, MKI67, AL591806.1, LHFPL5, C2orf70, DTL, AP000757.2, AC079781.3, CR2, ABHD11-AS1, LRRIQ1, AC087525.1, TLDC2, AC090921.1, PSORS1C2, AC025154.2, AC004233.2, AC097358.2, PLA2G4D, MSLN, AC105118.1, CDCA2, AC009955.2, LINC01583, PGC, GACAT2, FOXN1, HCN4, KAAG1, SFTA1P, KIAA0319, PKM, APCDD1L-AS1, AL442067.1, LAMC2, PLEKHS1, AL136968.1, AC010616.1, FAM227A, CXCL5, HOXB9, AP1M2, SPRR3, LINC02408, NDRG4, GCNT3, EXO1, MAPK15, AC024940.1, GRP, NPTX1, SLC34A2, ZBED2, GHRHR, ADCY2, AP003469.2, NMU, LDLRAD1, LINC00634, CDCP1, SSTR5-AS1,

Table SIII. Continued.

A, Upregulated genes (n=769)

RNF224, AL590666.2, INHA, NKILA, AC011352.1, AC008764.9, AC245100.6, AC069120.1, KLK1, LMX1B, RGS17, C2orf50, SPACA6P-AS, SOX11, MUC13, CLLU1OS, TRIM46, AC016705.2, AC013268.3, ATP8A2, AC245884.1, CST2, COL10A1, PPP1R14C, OR5BA1P, PLAC4, HIST2H2BF, IL11, AC084864.1, AC105219.4, KRT6B, PKP3, LINC01234, LHFPL3, DAW1, LHFPL3-AS2, TMEM61, ANKRD1, LMO1, PMEPA1, ACTBL2, AL512274.1, HIST1H1D, LINC00443, HOXC6, AL121832.1, PRAME, CTHRC1, LINC01977, UHRF1, CRLF2, AC244517.6, AHNAK2, KLK11, DNER, FOXD3-AS1, HIST3H2BB, PSCA, ADGRF4, AP000864.1, TESC, EPHA10, RPS29P11, CDC20B, B3GALT1, SULT2B1, MYOM3, C1orf116, MMP10, HIST1H3J, KRT79, AL365181.3, TFF1, AC023421.2, ARHGAP40, FAM81A, SLC4A11, UGT8, B4GALNT2, WNT7B, RUNDC3A, GAD1, AL136084.2, AP000696.1, AC011767.1, CLDN18, NCAPG, SYT16, GJB4, FAM155B, MCIDAS, SNAP91, LINC01956, SSTR5, AC013275.1, FXYD3, EVPL, OTOG, NPFFR1, CPNE7, USH1C, GULP1, MISP, NEK2, CENPM, SLC5A8, LINC00592, AL583722.1, MNX1, CENPF, AC010487.2, AL355796.1, PRSS1, ELAVL3, SLC6A17, C2CD4A, KRT23, AC022028.2, HAPLN1, ZBTB45P1, TNNT1, SPOCD1, LINC01913, BICDL2, DLG3-AS1, HIST1H2BF

B, Downregulated genes (n=705)

AC115619.1, RBP5, XPNPEP2, C3orf85, CYP26A1, SLC4A1, GLT1D1, FYB2, TAS2R60, AC007406.2, KRT16P2, ACOT12, AL161668.3, GSTA1, CFHR5, CYP39A1, CCDC177, AC116025.1, MROH2A, ARSF, AC026371.1, AC020978.5, AL023755.1, HMGCS2, AC079061.1, EIF3KP2, PROZ, C8A, RGN, AC010280.2, RTP3, HRG, ZG16, PON3, AL772337.1, BX842568.2, DEPDC7, AQP9, ARID3C, LDHD, MBL2, SERPINA12, UGT3A1, AL162293.1, SLCO1B3, UGT1A1, AC006504.7, AC020907.5, OXT, AMBP, AP006285.1, AL080248.1, AC006037.2, AC005180.1, CYP2D6, LINC01744, CYP2C19, UGT1A2P, ARPP21, SLCO2B1, LYZL1, MT1JP, UGT2B7, C3P1, AP006285.2, CECR2, LINC01370, TDRD15, AC062004.1, LINC02027, AQP7P2, FOLH1B, COX6B1P4, GHR, CLEC1B, AP003716.1, GBP7, FP700125.1, APOC3, AC007666.1, AC099684.1, BHMT, GSTA2, ANGPTL3, AL121827.1, NPY6R, ZNF385B, ETNK2, APOE, AP003471.1, ALDH2, AL133419.1, ORM1, PON1, AL121845.2, KRT16P1, APOC4, SHBG, FGG, UGT2B10, NPW, DNASE1L3, PLIN2, LINC02499, BCHE, LINC00399, SAA2-SAA4, AP001880.2, PKLR, FAM83A-AS1, HAO1, GPD1, AC079360.1, PCK2, TF, CRHBP, GCK, AC119424.1, AL138749.1, DAO, AP001783.1, BX842568.4, AC137056.1, TFR2, PCP4L1, F9, MPPED1, IDO2, CYP1A1, VSNL1, SMLR1, APOB, FGB, SLC38A4, HAL, AC092155.1, CCDC196, DBH, SLC47A1, MT1M, ENHO, UGT2B4, LINC02275, TRIM55, CDHR5, CYP4F3, CYP7A1, MTTP, SRD5A2, ADRA1A, KHK, AC092384.2, PBLD, AL354872.2, KRT17P8, AC012313.10, AL138847.2, CPB2, TMEM252, AC005077.2, LINC02266, MLIP, SLC34A1, NR1I3, FCN2, CYP4A22, LINC01863, KLKB1, SCUBE1, F11, HP, MT1G, HSBP1P2, UGT2A3P7, AC015468.1, AC084879.1, CYP2A6, ABCA8, CCND2P1, GXYLT1P6, PGLYRP2, TENM1, INS-IGF2, UPP2, LINC01093, AC004862.1, SEC14L3, SLCO1B7, SLC22A1, SLC25A18, MLIP-AS1, HPR, GC, AL356056.3, ALDH6A1, CXorf66, PFKFB1, BHMT2, AC137723.1, FETUB, MFSD2A, GDF2, ADH7, NECAB2, APOA5, AC244100.3, AC007991.3, TMEM82, VWCE, CYP2B7P, NBPF13P, AL359915.1, AKR1C4, FAM99B, CFHR4, FAM9B, NUGGC, SLC1A2, AL109933.4, AC009166.1, CPN1, AJ009632.2, AC090877.2, ABCG8, F2, FUOM, LINC01727, APOA2, LGSN, AC006960.2, ARG1, USH2A, CFHR1, AP000445.1, HBD, PCK1, LRCOL1, AC087164.2, SULT2A1, AC005035.1, CBS, AKR1C5P, ADH1C, AC079598.4, AC005357.2, DPYS, AZGP1P1, SLC6A13, CYP2C9, GCGR, CYP2A7, AL390778.2, CA5A, CYP2E1, SC5D, LINC01767, KDM8, CTH, CLEC4M, ESR1, SYT7, CYP4F12, SLCO1B1, AC243836.1, AC073174.1, ITIH3, AL360007.1, PRPF38AP1, MT1XP1, AC008708.1, CYP2A13, UGT1A4, AMD1P4, FOXN4, AF186996.8, RDH16, AL928921.1, ANG, DMGDH, ADRB2, AC024651.1, AFM, HPGD, AC069294.1, MFAP3L, AC011604.2, KANK4, AC021242.2, AL117382.2, THRSP, CYP4A11, AGXT2, MT1X, MST1, GNG5P2, SERPINF2, CUX2, GLYCTK, SPACA7, AL157832.2, CTNNA3, SERPIND1, TBX15, KLHL6-AS1, BMPER, GPT, PCDH9-AS2, AADAT, APOM, SHMT1, GLTPD2, MOGAT2, IL27, GPR88, CHAD, ASGR1, SERPINA4, AC099509.1, AC091729.2, AL161740.1, BMP10, AC138356.1, LINC02156, FAM151A, UGT2A1, APOF, AC018467.1, MRO, C14orf180, AC133539.2, AC021074.3, AC008592.5, AC122713.2, PROC, HSD17B13, ACSM5, PLIN1, SLC7A2, LINC00844, AL161645.1, CD14, VNN3, ABCC9, HORMAD2, AC021146.9, BPIFB4, AC015468.4, GREM2, GLYATL1, SHD, SDS, LINC01625, ETNPPL, TRIM80P, LINC02362, LINC01621, LINC00890, SULT1E1, AC087045.2, ALDH1L1, ABCG2, LINC01554, HPD, CD302, SLC25A47, BDH1, NOL4, GADD45G, LEAP2, AQP7P1, DNMT3L, SMUG1P1, SLC10A1, RPL17P11, TERB2, CR936218.2, PRG4, TTR, AC022816.1, RANBP3L, CYP1A2, AC012379.1, PLA2G12B, UROC1, ACADSB, MT1E, RBP4, TRPC5, AP001043.1, CDO1, CES3, TTC36, AL592494.1, LINC01146, TSKU, F11-AS1, SERPINA7, LINC01831, GLYATL3, AC026765.2, SOX5, APOL5, APOC1P1, RNU1-75P, SLC6A1, FABP1, GYS2, LINC01151, FMO3, LINC01485, HS1BP3-IT1, LPA, CD5L, C8B, NDST3, SORD2P, SLC22A7, ABCA6, TAT, GOLGA6B, AC010280.1, AC093829.1, AC012313.3, AC006205.2, PLGLB2, CYP4F2, NCAM2, AC009812.2, COLEC10, AL161630.1, AC010969.1, LINC01428, GALP, ACSM2A, APOH, ASPG, FGA, IGFBP1, AC073321.1, FP325317.1, AC079598.1, AL355096.1, ASPDH, PTGR1, UPB1, LINC02428, CYP2D7, AL590483.2, CALML3, CHRNA4, SERPINA11, FNDC5, CYP27A1, ALDH8A1, SLC38A3, AL355974.2, SLITRK3, NAT2, MASP2, AQP7P3, F13B, AKR1D1, AC099508.2, AP001198.2, AZGP1, NEU4, GNMT, HNF4A-AS1, LINC01702, CCL16, LINC02160, AVPR1A, UNC93A, A1BG, ABAT, C10orf126, SLC22A25, AC136601.2, KLB, DGAT2, ACSL1, AL133279.1,

Table SIII. Continued.

B, Downregulated genes (n=705)
PRAMEF33, AC007406.1, CYP3A43, AC090796.1, BX547991.1, AC244394.1, AC007298.1, MIR4290HG, AC092071.1, C2, AKR1C8P, NTF3, ABCB4, SORD, AMDHD1, FBP1, ADH4, OIT3, LINC01018, LINC02153, AC025423.3, GLYAT, AC004160.2, ADH1A, LINC01780, PITPNM2-AS1, ANGPTL6, AP006216.2, MT1CP, SLC17A2, AC063919.1, GSTA12P, SAA1, KNG1, ABCG5, LINC02037, GPAM, KRT16P3, CHRM2, SEC14L2, ASS1P2, AC120042.1, UGT2B24P, MAT1A, XAGE3, CYP17A1, LECT2, AL663023.1, CFHR2, ITIH1, PLG, UBTFL10, AOC4P, AC026461.2, AC024559.2, SLC13A5, CYP2C8, TSLP, TMEM220, SPP2, AP001065.3, AC112206.2, LINC01818, HAO2, PLGLA, PLGLB1, AC090227.2, SAA4, U91324.1, AC080129.1, AZGP1P2, DCXR, HAAO, ADH1B, CYP2A7P1, MIR146B, AC007298.2, AC005495.1, KCNN2, SARDH, HFE2, AC008549.1, LINC01714, SLC6A12, TPRG1-AS1, MYRIP, EVA1A, AC006329.2, COX6A2, CPS1, CNDP1, SLC2A2, PRAMEF30P, FCN3, GBA3, AL592182.2, CES5A, RD3L, TCTEX1D1, AC137723.2, CLEC4G, AKR1C6P, RNU1-70P, OTC, PPP1R1A, ABCB11, CYP2B6, ORM2, AHSG, APOC4-APOC2, RTL4, FXYD1, HPX, PRAMEF10, KMO, CPS1-IT1, MASP1, AC083902.1, AC097063.1, AC080128.1, CFHR3, G6PC, MARCO, ADH6, AGXT, MT1H, LCAT, APOA4, AC138430.1, INHBC, ADORA2BP1, F12, TDO2, HSD11B1, MT1A, LDLRAD4-AS1, AC005304.2, UGT2B27P, C4BPA, ALB, SAA2, ALDOB, HAMP, SERPINC1, AL391095.2, AC007423.1, NR1I2, AC104809.1, GMNC, AC004160.1, APOA1, CYP8B1, LRRC37A7P, ASCL1, TTPA, FTCD, HULC, AC244100.1, ARL4AP3, SLC2A9, AC011591.1, MTND4P20, GOLGA6A, AL355877.1, JAKMIP2-AS1, ACOX2, TM6SF2, CPN2, AP001781.2, STAB2, AC068631.1, AGMAT, HGFAC, AC121758.1, MT2A, PHYHD1, SYT9, AR, MTND6P4, HAO2-IT1, AC107396.1, LINC01847, AC006254.1, SLC22A10, PZP, AC087392.1, AC106822.1, MEP1B, AP000851.2, AOX1, CP, KCNJ8, HSD17B6, UGT1A3, EHHADH, HEPACAM, CES1, PIPOX, MT2P1, SERPINA10, INSIG1, AC022784.6, FAM99A, CYP3A4, BAAT, APOC1, TPPP2, SLC27A5, ACSM2B, PRODH2, AC244100.4, AC083841.1, AP000355.1, GLS2, C6, PAH, C9, AC027688.1, LINC02348, AC021744.1, RFPL1, AC008250.2, PDE3B