

## Supplementary Materials and methods

**Experimental cell lines.** The study assembled 3 pairs of HCSC sublines (Huh7-C, Hep3B-C and MHCC97H-C) and case-matched human HCC cells (Hep3B, Huh7 and MHCC97H) for RNA sequencing (RNA-Seq) (Table I). The HCSC sublines were previously demonstrated to have a reinforcement of stem cell properties, an induction of drug resistance, an emergence of EMT properties, and an enhancement of tumor-initiating capabilities (1).

**RNA sequencing.** RNA sequencing was produced by Beijing Genomics Institute (BGI, Beijing, China). Total RNA was extracted and treated with DNase I. Subsequently, mRNA from total RNA was enriched with oligo (dT) magnetic beads for eukaryotes, following fragmented into about 200 bp short fragments by mixing with the fragmentation reagents. The random hexamer-priming was used to synthesize the first strand cDNA, the DNA polymerase I, dNTPs and RNase H were used to synthesize the second strand, the double stranded cDNA was purified with magnetic beads, and the end reparation and 3'-end single nucleotide A addition were carried out. Then, the adapter-modified fragments were enriched for using PCR amplification. To monitor the quantification and qualification of DNA sample library, a quality control procedure was processed with Agilent 2100 Bioanalyzer and ABI StepOnePlus RT-PCR System. The captured DNA library was sequenced to a depth of 30-fold coverage with the Illumina HiSeq™ 2000 Analyzer.

**Raw sequence preprocessing.** To obtain high quality reads for further analysis, data filtering was performed by adaptor sequences to remove the low quality reads, which were defined when the percentage of unknown bases (N) is more than 10% or the percentage of bases (with quality value of 5 or less than 5) is greater than 50% in a read. The clean reads were mapped to reference genomes and sequences with SOAP software (2).

To exclude the effect of sequencing discrepancy and various gene length, gene expression levels were normalized by RPKM algorithms (Reads Per kb per Million reads), which makes transcripts across multiple samples comparable (3).

**Data mining.** The differentially expressed genes (DEGs) between HCSCs and case-matched hepatic cancer cells were analyzed by the Fold Change method (cutoff >2 or cutoff <0.5). Subsequently, genes with coherent differential expression (coherent up- or down-regulated in Huh7-C, Hep3B-C and MHCC97H-C, referred as meta-DEGs) were selected, and overlapping number of genes was calculated among three cell-lines datasets by using Venny tool and described as Venn diagram.

Hierarchical gene clustering was conducted with Cluster 3.0 software (4). Euclidean distance similarity metric and average linkage clustering method was used to measure the gene patterns. TreeView software was used to show the clustering map.

Enrichment analysis was used to study the function and mechanisms of DEGs. Onto-express tool was used to identify significantly enriched gene function in Gene Ontology (GO) database. Gene Ontology functional classification was performed using WEGO software<sup>16</sup> to classify GO function for DEGs. To identify the known pathways with significant accretions with

DEGs in HCSCs, we performed pathway enrichment analysis using Pathway-Express software in KEGG database (5). Hypergeometric test for the statistical scenario was used to screen GO terms or pathways that were significantly enriched in DEGs compared to the genomic background. The candidate GO terms or pathways with corrected P-value less than 0.05 were considered to be significantly enriched.

**miRNA targets prediction.** To analyze the interaction between miRNAs and genes, we compared the results from 6 existing miRNA-target prediction programs including DIANA-microTv4.0 (6), miRanda-rel2010 (7), miRDB4.0 (8), miRWalk2.0 (9), RNAhybrid2.1 (10), PicTar4 (11), PITA (12), RNA22v2 (13), and Targetscan6.2 (14). Candidate paired miRNA and DEGs which have at least five sources were considered for further analysis.

**miRNA expression detection.** The differential expression of miRNAs in cancer stem cells and their parental cell lines was detected by RT-qPCR (reverse transcription-quantitative polymerase chain reaction) using Eastep™ RT Master Mix (5X) (Promega, Madison, WI, USA).

**Experimental validation.** Perl scripts were run for text-mining searches in the Entrez PubMed database.

## References

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Figure S1. The expression of miR-338 and miR-450b in Hep3B, Hep3B-C, Huh7 and Huh7-C cells. The miRNAs were identified by RNA-seq and validated by reverse transcription-quantitative polymerase chain reaction. Data are presented as the mean  $\pm$  standard deviation of three independent experiments in triplicate. \*\*\* $P < 0.001$ , compared with the parental cells by Student's t-test. HCSCs, hepatic cancer stem-like cells.

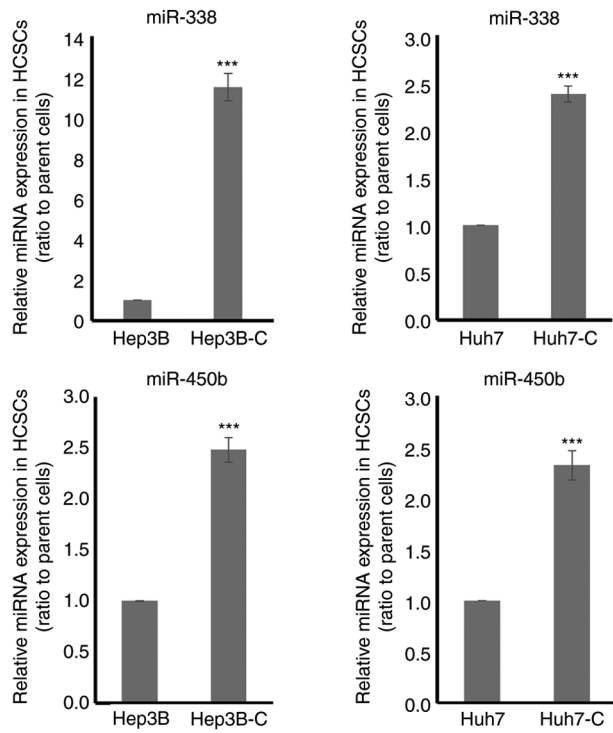


Table SI. Biological process.

GO identity	Gene Ontology term	Input	Reference	Corrected P-value
GO:0010467	Gene expression	37	3,103	0.001099062
GO:0016126	Sterol biosynthetic process	8	38	0.001099062
GO:0006139	Nucleobase, nucleoside, nucleotide and nucleic acid metabolic process	44	3,370	0.001099062
GO:0034960	Cellular biopolymer metabolic process	81	5,248	0.001099062
GO:0006695	Cholesterol biosynthetic process	7	30	0.001099062
GO:0043284	Biopolymer biosynthetic process	34	2,804	0.001099062
GO:0034961	Cellular biopolymer biosynthetic process	34	2,804	0.001099062
GO:0016125	Sterol metabolic process	11	89	0.001250294
GO:0016070	RNA metabolic process	31	2,609	0.001250294
GO:0044260	Cellular macromolecule metabolic process	85	5,348	0.001592897
GO:0043283	Biopolymer metabolic process	84	5,295	0.001592897
GO:0008299	Isoprenoid biosynthetic process	5	14	0.001592897
GO:0008203	Cholesterol metabolic process	10	80	0.002012175
GO:0006955	Immune response	27	493	0.003880617
GO:0006959	Humoral immune response	8	57	0.004970173
GO:0043170	Macromolecule metabolic process	90	5,432	0.004970173
GO:0007155	Cell adhesion	32	653	0.004970173
GO:0022610	Biological adhesion	32	653	0.004970173
GO:0034645	Cellular macromolecule biosynthetic process	42	2,999	0.008015554
GO:0006958	Complement activation, classical pathway	5	23	0.013541813
GO:0006396	RNA processing	1	465	0.01803579
GO:0022409	Positive regulation of cell-cell adhesion	3	6	0.018498285
GO:0009059	Macromolecule biosynthetic process	44	3,012	0.018498285
GO:0022407	Regulation of cell-cell adhesion	4	15	0.023150183
GO:0006259	DNA metabolic process	1	444	0.023171188
GO:0002455	Humoral immune response mediated by circulating immunoglobulin	5	27	0.023171188
GO:0050778	Positive regulation of immune response	8	78	0.026122247
GO:0006694	Steroid biosynthetic process	8	78	0.026122247
GO:0030155	Regulation of cell adhesion	8	78	0.026122247
GO:0006720	Isoprenoid metabolic process	5	29	0.027528366
GO:0006956	Complement activation	5	29	0.027528366
GO:0051891	Positive regulation of cardioblast differentiation	2	2	0.028882576
GO:0051890	Regulation of cardioblast differentiation	2	2	0.028882576
GO:0006996	Organelle organization	10	1,062	0.029480667
GO:0002541	Activation of plasma proteins involved in acute inflammatory response	5	31	0.033594311
GO:0008202	Steroid metabolic process	12	174	0.035737438
GO:0007162	Negative regulation of cell adhesion	5	32	0.036960371
GO:0002376	Immune system process	31	733	0.039915385
GO:0010468	Regulation of gene expression	34	2,371	0.041178238

P<0.05 was considered to indicate a statistically significant difference, using Fisher's exact test.

Table SII. Cellular component.

GO identity	Gene Ontology term	Input	Reference	Corrected P-value
GO:0005634	Nucleus	63	4,565	5.32202E-05
GO:0043227	Membrane-bounded organelle	119	7,020	0.000329916
GO:0043231	Intracellular membrane-bounded organelle	119	7,017	0.000329916
GO:0043226	Organelle	137	7,757	0.000456153
GO:0043229	Intracellular organelle	137	7,755	0.000456153
GO:0044421	Extracellular region part	33	637	0.000494468
GO:0044424	Intracellular part	171	9,201	0.000532589
GO:0005622	Intracellular	179	9,502	0.000725465
GO:0005576	Extracellular region	54	1,339	0.000943868
GO:0005615	Extracellular space	21	403	0.010705368
GO:0031012	Extracellular matrix	16	272	0.01279055
GO:0030529	Ribonucleoprotein complex	1	406	0.013810908
GO:0005581	Collagen	5	32	0.013810908
GO:0044420	Extracellular matrix part	8	86	0.013810908
GO:0044422	Organelle part	61	3,736	0.013810908
GO:0005578	Proteinaceous extracellular matrix	15	258	0.014140587
GO:0044446	Intracellular organelle part	61	3,720	0.014140587
GO:0032991	Macromolecular complex	29	2,090	0.014340084
GO:0070013	Intracellular organelle lumen	16	1,368	0.014723881
GO:0044428	Nuclear part	17	1,411	0.01678892
GO:0005654	Nucleoplasm	5	665	0.020509003
GO:0030286	Dynein complex	4	27	0.034704122
GO:0042995	Cell projection	18	386	0.03906214
GO:0031974	Membrane-enclosed lumen	19	1,429	0.04359791
GO:0044463	Cell projection part	6	68	0.045073273
GO:0031981	Nuclear lumen	13	1,080	0.048770976

P<0.05 was considered to indicate a statistically significant difference, by a Fisher's exact test.

Table SIII. Molecular function.

GO identity	Gene Ontology term	Input	Reference	Corrected P-value
GO:0003676	Nucleic acid binding	35	2,778	0.006434777
GO:0016705	Oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen	11	103	0.006434777
GO:0004497	Monoxygenase activity	8	77	0.034238087
GO:0004115	3',5'-cyclic-AMP phosphodiesterase activity	3	7	0.034238087
GO:0004421	Hydroxymethylglutaryl-CoA synthase activity	2	2	0.034238087
GO:0004053	Arginase activity	2	2	0.034238087
GO:0016297	Acyl-[acyl-carrier-protein] hydrolase activity	2	2	0.034238087
GO:0004320	Oleoyl-[acyl-carrier-protein] hydrolase activity	2	2	0.034238087

P<0.05 was considered to indicate a statistically significant difference, by Fisher's exact test.

Table SIV. DEGs between carcinoma stem-like cells and tumor cells by RNA-seq.

GeneID	Symbol	Hep3B	Hep3B-C	Hep3B-C/ Hep3B	Hep3B FDR	Huh7	Huh7-C	Huh7-C/Huh7	Huh7FDR	MHCC97-H	MHCC97-H-C	MHCC97-H-C/ MHCC97-H	MHCC97 FDR
163183	C19orf46	2.2404545	13.0011570	5.8029106	0.0000003	0.0010000	0.4492095	449.2095174	0.2329616	0.0010000	1.5673397	1567.3397141	0.0063164
285033	LOC285033	0.0010000	0.4011690	401.1690388	0.8006126	0.0010000	1.2890724	1289.0723767	0.2334129	0.0010000	1.3493131	1349.3131282	0.2853181
284422	C19orf77	6.0837715	15.6588470	2.5738716	0.0005787	0.2427150	1.0164932	4.1880120	0.3601429	0.0010000	1.3299948	1329.9947684	0.1023050
55301	OLAH	0.0010000	0.4698534	469.8533781	0.2337161	0.1201664	0.6290729	5.2350150	0.2297309	0.0010000	0.6584707	658.4706923	0.1021635
728402	TP1IP3	0.0010000	0.3551983	355.1983081	0.5340045	0.0010000	0.1900258	190.2258495	0.6484458	0.0010000	0.3982309	398.2309150	0.4556942
199720	GGN	0.0010000	0.1000129	100.0128941	0.7990323	0.0010000	0.2142469	214.2469410	0.4058037	0.0010000	0.3363886	336.3886489	0.2852167
146310	RNF151	0.0010000	0.2706379	270.6379069	0.7890430	0.0010000	0.2898793	289.8793410	0.6460156	0.0010000	0.3034259	303.4259421	0.6731996
79570	NKAIN1	0.4154682	2.7652181	6.6556681	0.0002882	0.0010000	0.4627837	462.7837052	0.0729202	0.0010000	0.2906463	290.6462695	0.2855213
53342	IL17D	0.3710414	1.2733506	3.4318289	0.1448296	0.1184230	0.3719677	3.1410090	0.5328189	0.0010000	0.2595670	259.5669532	0.4578375
763	CA5A	0.6370001	1.9873411	3.1198444	0.1969247	0.0010000	0.2128634	212.8634275	0.6559691	0.0010000	0.2228109	222.8109317	0.6810502
170482	CLEC4C	0.0010000	0.1639481	163.9480775	0.7981630	0.0010000	0.1756042	175.6042279	0.6596426	0.0010000	0.1838105	183.8105403	0.6843173
9074	CLEDN6	0.0010000	0.1572466	157.2465503	0.7946512	0.0010000	0.1684262	168.4262448	0.6554824	0.0010000	0.1762971	176.2971167	0.6806773
4224	MEP1A	20.2743919	144.7462816	7.1393649	0.0000000	0.0010000	0.2363373	236.3372708	0.2327687	0.0010000	0.1649212	164.9211676	0.4568317
1482	NKX2-5	0.0010000	0.4077497	407.7497297	0.3658833	0.0010000	0.1455798	145.5797826	0.6614329	0.0010000	0.1523830	152.3829968	0.6851794
6405	SEMA3F	7.1682436	17.2170661	2.4018528	0.0000000	0.7521679	1.8375514	2.4430070	0.0240220	0.0010000	0.1373874	137.3874004	0.4593544
940	CD28	0.0010000	0.0565873	56.5872797	0.8048390	0.0010000	0.0606104	60.6104427	0.6697063	0.0010000	0.1268858	126.8857630	0.4603713
85376	RIMBP3	9.4170506	0.3718762	37.1876012	0.7987061	0.0380434	0.0796630	2.0940060	0.7202062	0.0010000	0.0833858	83.3858277	0.4582043
5313	PKLR	9.4170506	67.2548095	7.1418125	0.0000000	1.0863549	2.6539725	2.4430070	0.0097862	0.0010000	0.0793714	79.3713605	0.6928719
64005	MYOIG	0.2105850	0.9197892	4.3677822	0.0527821	0.0010000	0.0703702	70.3702212	0.6471395	0.0010000	0.0736588	73.6587527	0.6737730
2041	EPHA1	5.6481178	11.9183718	2.1101493	0.0000008	0.0010000	0.1372659	137.2658866	0.4032914	0.0010000	0.0718403	71.8402885	0.6748180
10319	LAMC3	0.0010000	0.2490015	2049.0014568	0.0000000	0.0010000	0.1135179	113.5178528	0.2339309	0.0010000	0.0396076	39.6075844	0.6914405
115207	KCTD12	0.0010000	0.0690806	69.0805752	0.5365014	0.1766756	0.5179438	2.9316084	0.0839095	0.0010000	0.0387249	38.7248757	0.6887588
400745	SH2D5	0.8104555	4.9446124	6.1010291	0.0000007	2.0118627	4.0323018	2.0042629	0.0027218	0.1396883	4.0947465	29.3134509	0.0005091
3242	HPD	23.5345336	337.2966129	14.3319863	0.0000000	4.4913356	24.4851281	5.4516363	0.0000000	2.8227249	71.4567028	25.3147956	0.0000003
4597	MVD	10.7711565	168.1416775	15.6103643	0.0000000	26.7654436	79.6998620	2.9777150	0.0000000	2.5361017	37.6755287	14.8556855	0.0000001
3373	HMGCS1	49.6733013	185.5993129	3.7363998	0.0000000	23.1686994	87.1358637	3.4587985	0.0000000	1.4888622	101.4964099	13.7152546	0.0000000
51666	ASB4	0.0010000	0.5838151	583.8151053	0.2338955	0.0010000	0.6253224	625.3223724	0.1314544	0.1814245	18.2248370	12.2407817	0.0000000
10814	CPLX2	0.0010000	0.5925859	592.5859205	0.0041433	0.0010000	0.0488244	48.8243664	0.6517948	0.0000000	145.7543687	10.3307954	0.0000000
2810	SFN	1.3127530	17.0376338	12.9785527	0.0000167	3.3518660	19.8281878	5.9155670	0.0000000	25.4546101	258.4247599	10.1523755	0.0000000
7425	VGFB	0.0010000	0.0843822	84.3822068	0.7941136	1.1222121	41.9370134	37.3699534	0.0000026	0.1048893	1.0406571	9.9214757	0.0207857
201175	SH3D20	0.0010000	0.3131218	313.1217643	0.5337680	0.0010000	0.1676918	167.6918281	0.6470210	0.3892187	3.8616243	9.9214757	0.0007528
1307	COL16A1	0.0618292	0.2314768	3.7438133	0.3199148	0.0010000	0.0413223	41.3223416	0.6523362	0.0959106	0.9083216	9.4704995	0.0009321
6713	SQLE	29.4447421	82.4245396	2.7992957	0.0000000	23.5126673	65.8276234	2.7996663	0.0000000	31.3457774	284.8242067	9.0865255	0.0000000
402415	XKRX	0.0010000	0.0755622	75.5621795	0.7911701	0.0010000	0.3237376	323.7375734	0.1313287	0.0939258	0.8471661	9.0195234	0.0328461
85409	NKD2	1.7281904	20.8478491	12.0633948	0.0000007	1.4708689	4.1066777	2.7920080	0.0056347	0.1489335	1.2089786	8.1175710	0.0525363
65078	RTN4R	1.6192216	13.6957730	8.4582244	0.0000007	2.0671878	4.4489455	2.1521728	0.0205608	0.2790355	2.1396351	7.6665949	0.0039604
4640	MYO1A	0.0010000	0.0596257	59.6257331	0.8055570	1.9519308	7.9192501	4.0571366	0.0000000	1.1858622	8.7572775	7.3847347	0.0000001
3754	KCNF1	0.0010000	0.20705160	2070.5159567	0.0000640	2.6958433	6.8547789	2.5427216	0.000820	0.8189067	5.6978858	6.9579180	0.0000390
3156	HMGCR	22.3887442	52.6339910	2.3509131	0.0000000	15.0131395	41.3122366	2.5171387	0.0000000	8.7701692	57.7450043	6.5842520	0.0000000
9415	FADS2	7.8940268	41.1837154	5.2170754	0.0000000	2.6594593	7.1077052	2.6726129	0.0000005	60.4615295	531.6676799	5.8163874	0.0000000
256933	NPB	0.5604773	4.8960858	8.7355643	0.0168094	0.3577682	0.7491687	2.0940060	0.7193779	13.4760673	72.5363529	5.3826188	0.0000000
2222	FDFT1	46.7224121	436.2770444	9.3376396	0.0000000	96.9025096	211.5700750	2.1833292	0.0000000	63.1946352	317.9073991	5.0306074	0.0000000
29881	NPC1L1	12.6554382	69.1912862	5.4673165	0.0000000	0.0010000	0.0914381	91.4380644	0.4038103	2.3345413	11.7246141	5.0222346	0.0000000
4953	ODC1	39.0127013	242.8002650	6.2236210	0.0000000	172.6101264	575.4051498	3.3335538	0.0000000	32.5962207	160.4714153	4.9230068	0.0000000
28984	C13orf15	0.0010000	0.9721470	972.1469939	0.1544804	0.1989036	0.4165053	2.0940060	0.7221068	0.4833619	2.1798470	4.5097617	0.0891343
7421	VDR	0.0010000	0.4962734	496.2734057	0.0103541	0.3230076	1.3047302	4.0384402	0.0014160	0.9533618	4.2994344	4.5097617	0.0000001
56241	SUSD2	0.4338725	1.4212954	3.2758366	0.0327298	1.9386696	4.6395266	2.3931497	0.0003264	0.6730317	2.9593324	4.3970176	0.0001115



Table SIV. Continued.

GeneID	Symbol	Hep3B	Hep3B-C	Hep3B-C/ Hep3B	Hep3B FDR	Huh7	Huh7-C	Huh7-C/Huh7	Huh7FDR	MHCC97-H	MHCC97-H-C	MHCC97-H-C/ MHCC97-H	MHCC97-FDR
140711	C20orf118	0.0010000	1.1610512	1161.0512065	0.0103565	0.7558532	8.5921316	11.3674612	0.0000645	4.0672501	17.6323030	4.3351903	0.0000000
2194	FASN	77.3127384	1223.0582020	15.8196208	0.0000000	55.3438333	177.2456229	3.2026264	0.0000000	39.2587252	165.7107438	4.2209915	0.0000000
4113	MAGEB2	0.0010000	0.1338061	133.8060707	0.7903711	0.1368852	0.5732769	4.1880120	0.3595701	0.3326491	1.3501512	4.0587855	0.1330635
2049	EPHB3	0.0010000	0.7146893	714.6892971	0.0026027	0.2088959	3.6634704	17.5373003	0.0002627	2.2209449	8.1272135	3.6593495	0.0000000
3352	HTR1D	0.1217827	0.9118636	7.4876266	0.0359843	1.0883219	2.6045173	2.3931497	0.0165957	3.8726922	14.1423246	3.6518070	0.0000000
7433	VIPR1	0.0010000	0.8490525	849.0524946	0.0103553	1.9740701	22.9834538	11.6426734	0.0000000	2.1107900	7.7018658	3.6488072	0.0000000
1717	DHCR7	25.0033879	128.2866631	5.1307700	0.0000000	71.6975456	159.9189815	2.2304666	0.0000000	24.8188657	89.8136234	3.6187642	0.0000000
285679	C5orf60	0.2893999	0.7223060	2.4958755	0.5850328	0.0010000	0.1934149	193.4148830	0.6657320	0.2244614	0.8098141	3.6078093	0.4349008
284417	TMEM150B	1.9728802	4.1854539	2.1214942	0.1979271	0.0010000	0.2637074	263.7073776	0.6590889	0.3060371	1.1041237	3.6078093	0.4347238
50509	COL5A3	0.0559206	0.3838201	6.8636577	0.0526711	1.1065664	2.6535181	2.3979746	0.0001349	0.4770987	1.6821612	3.5258137	0.0002408
6712	SPTBN2	12.3336364	25.8809110	2.0984007	0.0000000	2.4655348	5.5735255	2.2605747	0.0000000	1.8383238	6.3252698	3.4407811	0.0000000
6004	RGS16	0.0010000	0.0885805	88.5804991	0.7945974	0.0010000	0.0948783	94.8782711	0.6553000	0.2202159	0.6951848	3.1568332	0.2826476
89870	TRIM15	4.1914833	18.4043512	4.3908921	0.0000000	8.3239010	17.9490577	2.1563276	0.0000000	1.4448696	4.3440117	3.0065078	0.0015463
1364	CLDN4	0.0010000	6.8539829	6853.9829312	0.0000000	0.6044575	22.6567022	37.4827076	0.0001685	46.2707005	128.9115851	2.7860305	0.0000000
644165	BCRP3	0.0010000	0.3025671	302.5670981	0.5373388	0.0010000	0.1620393	162.0392945	0.6707869	0.1880495	0.5088351	2.7058570	0.6222177
9033	PKD2L1	0.0010000	0.1412178	141.2178131	0.5335316	0.0010000	0.0756290	75.6289595	0.6460747	0.0877688	0.5247574	2.7058570	0.6205019
197342	EME2	0.0010000	1.7750603	1775.0603089	0.0103658	0.0010000	1.0370515	1037.0514851	0.0395809	0.2005861	0.5427574	2.7058570	0.6219403
10603	SH2B2	0.3647692	1.4794300	4.0557977	0.0740333	0.9313690	2.3159721	2.4866321	0.0708524	1.6975119	4.4656348	2.6306943	0.0087049
5307	PITX1	3.4771703	17.0859628	4.9137549	0.0000000	3.6992898	7.7463351	2.0940060	0.0004428	3.0340443	7.9056273	2.6056401	0.0000355
4130	MAP1A	0.0010000	0.2306283	230.6282737	0.0103635	0.0010000	0.1571978	157.1978285	0.0210754	2.7885866	7.0988972	2.5456972	0.0000000
8140	SLC7A5	9.4236188	73.4057218	7.8954701	0.0000000	42.6411141	91.2716020	2.1404601	0.0000000	50.5739343	127.8078424	2.5271485	0.0000000
55502	HES6	1.0095147	16.8499794	16.8916766	0.0000030	3.5442063	7.4904235	3.0458269	0.0000104	1.9574744	4.9435361	2.5254665	0.0272561
133522	PPARGC1B	0.5292061	1.1887492	2.2462880	0.1561387	0.7431751	2.6880044	3.6169195	0.0002481	0.3283660	0.8144689	2.4803689	0.2325098
3158	HMGCS2	1.0129703	11.1664274	11.0234502	0.0000077	1.2932138	7.1084935	5.4967658	0.0000045	25.7961624	63.3048894	2.4540429	0.0000000
3955	LFNG	1.1634508	4.0835088	3.5098250	0.0005605	0.4641643	2.0411218	4.3974126	0.0041127	3.1583445	7.7321212	2.4481563	0.0001187
54863	C9orf167	6.3637387	19.9068181	3.1281640	0.0000000	0.1624860	1.9280645	11.8660341	0.0003970	2.9614678	17.1229408	2.4052062	0.0000010
10940	POP1	2.6927486	5.8125538	2.1585951	0.0000037	2.8802449	7.4904235	2.6006204	0.0000000	7.3944999	17.5137658	2.3684855	0.0000000
80115	BALAP2L2	10.4622435	25.4094297	2.4286789	0.0000000	0.1027437	5.4862199	53.3971533	0.0024166	4.7439324	11.0348023	2.3260876	0.0000245
196483	FAM86A	1.4549264	6.5363673	4.4925759	0.0000008	5.0150865	10.6960957	2.1327839	0.0001173	1.8055289	4.1730337	2.3112529	0.0112212
6721	SREBF2	49.8718090	105.6626703	2.1186853	0.0000000	29.4290487	59.1060341	2.0084249	0.0000000	14.2411036	31.2425840	2.1938317	0.0000000
8514	KCNAB2	3.2663579	10.7340234	3.2862361	0.0000000	0.1390004	0.6549024	4.7115135	0.0830971	3.5467881	7.6167471	2.1475056	0.0000926
3960	LGALS4	0.0010000	0.3368691	336.8690756	0.5374187	0.1723105	0.5412290	3.1410090	0.5342576	348.5987959	747.4308551	2.1441005	0.0000000
9754	STARD8	0.2796145	2.0064138	7.1756421	0.0000384	0.3123499	0.7942189	2.5427216	0.0849203	8.3495657	17.8981373	2.1436010	0.0000000
10544	PROCR	0.0010000	0.1485709	148.5708785	0.8055017	0.7599489	1.5913376	2.0940060	0.3301948	56.3266635	120.0972435	2.1321562	0.0000000
1594	CYP27B1	0.4164705	0.9528370	2.2878859	0.2913847	0.3544595	0.9278004	2.6175075	0.2089611	0.3230187	0.6798108	2.1045554	0.4650506
124935	SLC43A2	1.4956023	37.4012300	24.7667649	0.0000000	2.1296803	8.8422375	4.1519085	0.0000000	7.0492560	14.8087228	2.1007497	0.0000001
51491	NOPI6	11.5727609	34.9017064	3.0158496	0.0000067	50.8896899	102.6960993	2.0180139	0.0000000	33.4104793	69.7145116	2.0866061	0.0000014
56666	PANX2	1.0181148	9.8114222	9.6368527	0.0000007	0.7943110	1.6632919	2.0940060	0.1044127	3.2463802	6.7266708	2.0720527	0.0006407
55612	FERMT1	0.1340532	0.3764026	2.8078600	0.2655521	0.8129137	3.1357167	3.8573795	0.0000002	7.3820840	15.2390393	2.0643275	0.0000000
4938	OAS1	0.4152183	9.0679159	21.8389109	0.0001467	3.7106346	11.6551367	3.1410090	0.0000002	12.59205736	25.89553398	2.0564975	0.0000000
374383	DKFZp686O24166	2.1662998	4.5280733	2.0902958	0.0000389	0.4839832	1.5824442	2.3931497	0.0165995	5.1272645	5.0924378	2.0544470	0.0000384
100130872	LOC100130872	0.1386562	0.4758445	3.4318289	0.1448695	0.1327622	0.2780048	0.2991437	0.4883054	2.5212835	3.6772826	2.0544470	0.00002043
6480	STGAL1	1.591791256	57.8323027	0.3633159	0.0000000	17.7689626	2.1486491	0.1209215	0.0000000	28.7670047	14.2623286	0.4957878	0.0000000
4092	SMAD7	4.5854925	0.1395710	0.0304375	0.0000000	1.4992190	0.4484819	0.2991437	0.0179772	7.4600890	3.6772826	0.4929274	0.0003369
161779	PGBD4	0.8936688	0.3717477	0.4159793	0.2176680	1.5212092	0.5972665	0.3926261	0.1109340	2.5415078	1.2503557	0.4919740	0.1078296
259295	TAS2R20	1.6234516	0.3776611	0.2079896	0.0186623	0.3454313	0.1205559	0.3490010	0.5932250	3.0779598	1.5142762	0.4919740	0.1078132
285954	LOC285954	1.1149215	0.1039948	0.0739948	0.0218613	0.1186142	0.0010000	0.0084307	0.6783476	0.5368176	0.2599861	0.4843099	0.2574037
1326	MAP3K8	6.6909697	0.5566609	0.0831959	0.0000000	2.7761700	1.1924752	0.4295397	0.0113833	3.8921875	1.8723027	0.4810412	0.0108437

Table SIV. Continued.

GeneID	Symbol	Hep3B	Hep3B-C	Hep3B-C/ Hep3B	Hep3B FDR	Huh7	Huh7-C	Huh7-C/Huh7	Huh7FDR	MHCC97-H	MHCC97-H-C	MHCC97-H-C/ MHCC97-H	MHCC97-FDR
10370	CITED2	53.1573086	5.8072806	0.1092471	0.0000000	82.3731060	37.7994245	0.4588807	0.0000000	79.2658407	38.0633609	0.4801988	0.0000000
399669	ZNF321	1.9230088	0.8306984	0.4319785	0.0730634	0.9442382	0.3954481	0.4188012	0.2725934	9.7521475	4.6566912	0.4775042	0.0002106
53876	GSDMB	42.2543376	0.9274258	0.0219487	0.0000000	2.4396884	0.8514537	0.3490010	0.0559262	5.5993880	2.6737312	0.4775042	0.0292109
7626	ZNF75D	1.4338828	0.2333995	0.1627745	0.0000190	0.6765165	0.333246	0.4927073	0.2053263	6.4310351	3.0528880	0.4747118	0.0000017
25950	RWDD3	8.1071798	2.0932253	0.2581940	0.0000659	1.1379818	3.1762326	0.4449763	0.0135469	8.6731174	4.1069377	0.4735250	0.0152928
65983	GRAMD3	5.4544335	1.5206666	0.2787946	0.0000008	0.7407906	0.3102440	0.4188012	0.4188012	5.8507101	2.7603091	0.4717905	0.0012361
63908	NAPB	4.1037947	1.4473184	0.3526781	0.0000295	0.3986295	0.1788713	0.4487156	0.4326285	3.8748889	1.8098926	0.4670825	0.0026741
154214	RNF217	4.0640890	4.8302119	0.1188512	0.0000084	1.9765488	0.7760447	0.3926261	0.1109157	4.6531712	2.1661619	0.4655238	0.0330412
121457	IKBP	11.8156754	2.8753194	0.2433479	0.0000000	16.1404622	7.4229746	0.4598985	0.0000000	42.3393273	19.6726345	0.4646421	0.0000000
54465	ETAA1	16.6159420	1.9029563	0.1145259	0.0000000	2.7522975	1.1948362	0.4341232	0.0099238	10.3589331	4.7819855	0.4616291	0.0000014
63027	SLOC2A23	12.7601214	6.1380431	0.4810333	0.0000000	23.3230825	10.6693721	0.4574598	0.0000000	15.2159056	6.9996442	0.4600215	0.0000000
3397	IDI	64.9823469	0.7051646	0.0108516	0.0000000	150.5905344	63.4451465	0.4213090	0.0000000	175.5268259	79.6525377	0.4537912	0.0000000
100128675	LOC100128675	1.5944902	0.3511455	0.2202243	0.0011805	0.3924937	0.1880554	0.4791297	0.7628473	0.2909889	0.1312290	0.4509762	0.5452015
7620	ZNF69	4.1621945	0.2597080	0.0623969	0.0000010	0.2656844	0.0010000	0.0037639	0.4415700	0.3228240	0.1455859	0.4509762	0.6932198
26115	TANC2	0.7053798	0.0366779	0.0519974	0.0000000	2.4576879	1.1392823	0.4635586	0.0000032	0.2279582	0.1028037	0.4509762	0.2728956
317751	MEST1T1	0.9584474	0.2657961	0.2773195	0.0404815	0.3398908	0.1423467	0.4188012	0.5027440	0.4955876	0.2234982	0.4509762	0.4280415
389649	C8orf86	0.6137850	0.0010000	0.0016292	0.0272098	0.0997949	0.0010000	0.0102094	0.6610416	0.2380289	0.1073454	0.4509762	0.6910048
285987	DLX6-AS1	2.4301440	0.3249288	0.1337076	0.0000513	0.2216040	0.0010000	0.0045126	0.4444924	0.2692634	0.1214314	0.4509762	0.6965128
84278	HIATL2	0.8785090	0.2740811	0.3119844	0.3826504	0.5607766	0.0010000	0.0017832	0.4402455	1.3627608	0.6145726	0.4509762	0.5460638
619208	C6orf225	2.1974237	0.4032718	0.1835203	0.0004825	6.3532982	2.3324922	0.3671309	0.0000137	2.2056215	0.9946827	0.4509762	0.0718105
25862	USP49	2.2821324	0.2034257	0.0891384	0.0000022	0.2081069	0.0726295	0.3490010	0.5968923	1.3871514	0.1520472	0.4509762	0.5476432
26002	MOXD1	9.4294455	1.1342035	0.1202832	0.0000000	2.3931264	0.5314932	0.2220915	0.0002473	0.5860760	0.7152825	0.4509762	0.1122359
653483	C6orf124	3.8842946	0.2796553	0.0719964	0.0000000	2.3840890	0.7987675	0.3350410	0.0152039	0.2317460	0.1045119	0.4509762	0.6972988
147700	KLC3	4.0436892	1.9223895	0.4754049	0.0370606	3.4415980	1.0295324	0.2991437	0.0047800	0.5973954	0.2694111	0.4509762	0.5482058
7058	THBS2	0.1188687	0.0010000	0.0084126	0.1571902	0.0379386	0.0010000	0.0263584	0.6620018	0.0921957	0.0415781	0.4509762	0.6913362
149069	DCDC2B	0.7677999	0.0010000	0.0013024	0.0665695	0.1633693	0.0010000	0.0061211	0.6833737	0.7940178	0.3580831	0.4509762	0.5478476
93556	EGFEMP1	1.1303921	0.4030454	0.3565536	0.1292899	0.1030801	0.0010000	0.0097012	0.6859755	0.2504981	0.1129687	0.4509762	0.6984812
338442	GPR109A	3.8454445	0.9389104	0.2441617	0.0002822	0.2134481	0.0010000	0.0046850	0.4455419	0.5187070	0.2339245	0.4509762	0.5480523
80094	FLJ14107	2.4406212	0.3514319	0.1439928	0.0010862	0.2396794	0.0010000	0.0041722	0.4408822	0.8736786	0.3940082	0.4509762	0.4272979
4485	MST1	21.0412330	9.1533689	0.4350206	0.0000000	5.2022255	2.1786983	0.4188012	0.0014581	0.4597124	0.2073194	0.4509762	0.5456070
55811	ADCY10	6.4304227	0.3722830	0.0578940	0.0000000	1.1425499	0.1329170	0.1163337	0.0000497	0.1028351	0.0463762	0.4509762	0.6928866
26013	L3MBTL1	1.2419210	0.0645767	0.0519974	0.0000074	0.4624389	0.0691679	0.1495719	0.1123811	0.6421643	0.2896008	0.4509762	0.3429713
3008	HIST1H1E	5.7175827	0.0010000	0.0001749	0.0000074	0.2807455	0.0010000	0.0035619	0.6700171	0.6822484	0.3076778	0.4509762	0.6940540
29940	DSE	52.1428475	0.0533369	0.0010229	0.0000000	0.5456430	0.0010000	0.0018327	0.0048719	0.2651968	0.1195974	0.4509762	0.5462671
83449	PMFBP1	4.3227233	0.5277218	0.1220809	0.0000000	0.0599851	0.0010000	0.0166708	0.6622282	0.1457716	0.0657395	0.4509762	0.6914467
2828	GPR4	0.2267678	0.0010000	0.0044098	0.1588825	0.7961370	0.0757780	0.0951821	0.0149837	0.1758834	0.0793192	0.4509762	0.6958965
154091	SLOC2A12	1.2949339	0.1923806	0.1485640	0.0000277	1.4563765	0.3709047	0.2546764	0.0002545	0.9565369	0.4313753	0.4509762	0.0897879
147650	NCRNA00085	2.2864506	0.0010000	0.0004374	0.0000074	0.1122696	0.0010000	0.0089071	0.6620584	0.8184896	0.3691193	0.4509762	0.4271670
374887	YJEFN3	0.3515825	0.0010000	0.0028443	0.3662922	0.8976993	0.2349735	0.2617508	0.4119293	0.5453819	0.2459542	0.4509762	0.6955049
202333	CMYA5	0.2945854	0.0334204	0.1134489	0.0015192	0.0512842	0.0178982	0.3490010	0.5941081	0.0830849	0.0374693	0.4509762	0.5464196
345930	ECT2L	0.1620531	0.0010000	0.0061708	0.1575144	0.1034429	0.0010000	0.0096672	0.4405881	0.1256900	0.0566832	0.4509762	0.6924984
339761	CYP27C1	0.5895480	0.0016962	0.0016962	0.0007329	0.1881624	0.0010000	0.0053146	0.1576459	0.2286297	0.1031065	0.4509762	0.5456577
220594	LOC220594	3.9044435	0.1353473	0.0346649	0.0000000	0.6461555	0.1449700	0.2243578	0.0307396	0.2243204	0.1011632	0.4509762	0.5461654
51306	FAM13B	3.1081566	0.6593936	0.2121494	0.0000000	1.6665787	0.7893653	0.4736442	0.0183915	5.7375076	2.5657357	0.4471865	0.0000014
55214	LEPREL1	0.9336237	0.0582552	0.0623969	0.0008352	2.5030227	1.2479392	0.4985729	0.0278552	2.8240988	1.2409448	0.4394127	0.0089853
220729	LOC220729	14.4798547	4.7998324	0.3314835	0.0000000	7.5098492	2.8729588	0.3825588	0.0007790	10.1778407	4.4316890	0.4354253	0.0009017
56967	C14orf132	3.8254018	1.4091524	0.3683672	0.0000000	4.8542993	0.0924085	0.0190364	0.0000000	1.7158670	0.7415728	0.4321855	0.0026805
91807	MYLK3	1.0791887	0.2693521	0.2495876	0.0001736	0.1653302	0.0577004	0.3490010	0.3649713	0.6361425	0.2717859	0.4272406	0.0804135



Table SIV. Continued.

GeneID	Symbol	Hep3B	Hep3B-C	Hep3B-C/ Hep3B	Hep3B FDR	Huh7	Huh7-C	Huh7-C/Huh7	Huh7FDR	MHCC97-H	MHCC97-H-C	MHCC97-H MHCC97-H	MHCC97-H-C/ MHCC97-H	FDR
151525	WDSUB1	6.4466521	1.1173640	0.1733247	0.0000001	3.3149225	1.4361657	0.4332426	0.0365259	5.2778708	2.2549206	0.4272406	0.0079796	
8654	PDE5A	2.2229835	0.0308238	0.0138660	0.0000000	0.0945995	0.0010000	0.0105709	0.2690228	1.1494456	0.4838144	0.4209111	0.0191469	
8552	INE1	1.3727795	0.6424287	0.4679767	0.3621580	0.8762831	0.2293677	0.2617508	0.4121672	3.9927808	1.6806057	0.4209111	0.1242279	
64129	TINAGL1	14.0573231	3.6627541	0.2605584	0.0000000	0.0986063	0.0010000	0.0101413	0.6731608	5.0321543	2.0532501	0.4080261	0.0031931	
113277	TMEM106A	0.8646792	0.0770761	0.0891384	0.0098639	0.2365494	0.0825560	0.3490010	0.5955266	3.6406923	1.4690375	0.4035050	0.0049131	
3306	HSPA2	1.6209110	0.6223988	0.3239809	0.0458670	0.8242635	4.6665444	0.4311189	0.0000003	1.7407313	0.6978030	0.4008677	0.0702673	
1286	COL4A4	0.0333869	0.0010000	0.0299519	0.3589848	0.1021318	0.0010000	0.0469224	0.6625113	2.3305700	0.0934250	0.4008677	0.2428259	
89857	KLHL6	0.3824016	0.0340867	0.0891384	0.0098661	0.1046132	0.0365101	0.3490010	0.5957044	0.3813358	0.1528652	0.4008677	0.2430974	
9246	UBE2L6	6.8016949	2.2069039	0.3244638	0.0012891	29.8709634	8.7279038	0.2921869	0.0000000	16.2484258	6.4711739	0.3982647	0.0000209	
26249	KLHL3	0.1521837	0.0010000	0.0065710	0.0663731	0.9390494	0.0678060	0.0722071	0.0000034	1.3377321	0.5323106	0.3979201	0.0075649	
51141	INSIG2	15.5050205	3.1692820	0.2044036	0.0000000	6.5697482	2.8586166	0.4351181	0.0002085	25.3994240	10.0986920	0.3975953	0.0000000	
51566	ARMCX3	13.7288055	5.5839894	0.4067353	0.0000000	6.0370611	2.3788037	0.3940334	0.0000055	22.5584078	8.9638905	0.3973636	0.0000000	
55900	ZNF302	12.1095582	1.4783454	0.1220809	0.0000000	0.0840203	0.0010000	0.0119019	0.6857326	15.1093442	5.9852300	0.3961277	0.0000000	
10472	ZNF238	4.3578147	0.6669591	0.1530490	0.0000000	0.1574555	0.0010000	0.0063510	0.2674608	3.6350565	1.4380034	0.3955931	0.0002952	
51380	CSAD	6.2773461	0.2398083	0.0382022	0.0000000	0.8995314	0.0856193	0.0951821	0.0149872	4.5706846	1.7924085	0.3921532	0.0012501	
203238	C9orf93	0.3960244	0.0988428	0.2495876	0.1176818	0.1516760	0.0529351	0.3490010	0.5938723	0.4300247	0.1662265	0.3865510	0.3043787	
440101	FLJ12825	0.6130843	0.1639481	0.2674152	0.0682028	0.1677208	0.0585347	0.3490010	0.5931074	0.4755143	0.1838105	0.3865510	0.3042023	
266812	NAP1L5	5.1345472	1.3257094	0.2581940	0.0000658	1.9213068	0.3549907	0.1847652	0.0077890	0.9612705	0.3715801	0.3865510	0.3041671	
5349	FXYD3	8.5328944	0.1365195	0.0159992	0.0000000	50.2779899	6.1414741	0.1221504	0.0000000	54.6425631	21.1221374	0.3865510	0.0000000	
653399	GSTT2	2.1682621	0.4162856	0.1919904	0.0029803	0.4258651	0.0010000	0.0023482	0.1581992	0.9055447	0.3500392	0.3865510	0.3046967	
222865	TMEM130	1.0141274	0.2192800	0.2079896	0.0186644	0.0719273	0.0010000	0.0139029	0.6641584	0.6117746	0.2364821	0.3865510	0.3043081	
57088	PLSCR4	4.2263682	0.3139431	0.0742820	0.0000000	0.5138681	0.0672527	0.1308754	0.0697288	8.0389383	3.0974031	0.3853000	0.0000003	
5797	PTRPM	31.0112106	1.2694851	0.0409363	0.0000000	11.8850584	5.9334160	0.4992332	0.0000000	23.6222418	9.1003942	0.3852468	0.0000000	
9404	LPXN	2.1955741	0.4566566	0.2079896	0.0058966	1.0511217	0.3668425	0.3490010	0.2275260	5.6763646	2.1759194	0.3833297	0.0023676	
123	PLIN2	863.3094569	256.1196867	0.2966719	0.0000000	97.6150560	32.5139210	0.330831	0.0000000	69.1095236	26.3484054	0.3812558	0.0000000	
55211	DPF4	0.1529484	0.1529484	0.2495876	0.1177808	0.2347020	0.0819112	0.3490010	0.5951122	1.1407135	0.4286955	0.3758135	0.1350926	
79686	C14orf139	2.6237076	0.5341815	0.2298833	0.0007344	0.4684064	0.0817371	0.1745005	0.1771172	1.1382890	0.4277844	0.3700317	0.0000048	
51201	ZDHHC2	4.9063775	1.8798235	0.3831388	0.0000122	12.0879436	5.2925564	0.4378376	0.0000000	5.2074383	1.9269174	0.3700317	0.0000048	
284551	LOC284551	2.0153464	0.0010000	0.0004962	0.0000005	0.2412096	0.0010000	0.0041458	0.2670731	0.4884759	0.1762328	0.3607809	0.3774661	
619383	SCARNA9	13.6927946	0.0010000	0.0000730	0.0000030	5.6188858	0.6536656	0.1163337	0.0425433	3.7929532	1.3684252	0.3607809	0.3777460	
100129935	LOC100129935	1.5084829	0.5882790	0.3899806	0.1292665	0.2407266	0.0010000	0.0041541	0.4405391	0.7312466	0.2638198	0.3607809	0.3775860	
201134	CCDC46	0.2944179	0.1224717	0.4159793	0.3787037	1.5661256	0.0010000	0.4188012	0.0480042	4.5670693	1.6477115	0.3607809	0.0000546	
4352	MPL	0.7577592	0.1773068	0.2339883	0.0361419	0.3023116	0.1266085	0.4188012	0.5021583	0.3673285	0.1325251	0.3607809	0.3776260	
5352	PLOD2	177.5179034	11.4640057	0.0645794	0.0000000	14.0082234	5.5142064	0.3936407	0.0000000	137.5527246	49.0908638	0.3568876	0.0000000	
100131434	LOC100131434	0.2942088	0.0010000	0.0033989	0.1597497	0.5634048	0.0983144	0.1745005	0.1774582	2.0537218	0.7203619	0.3507592	0.0411683	
147081	C17orf69	2.9460929	0.0875367	0.0297128	0.0000001	1.1641639	0.1875205	0.1610774	0.0182785	2.8290715	0.9814183	0.3469047	0.0101356	
115361	GBP4	0.3932918	0.1402296	0.3565536	0.1292182	0.1075924	0.0375499	0.3490010	0.5946392	0.9665049	0.1965232	0.3469047	0.0922787	
1837	DTNA	8.6287040	3.8315887	0.4440515	0.0000000	0.1013731	0.0353793	0.3490010	0.5965949	0.9854002	0.3332940	0.3382321	0.0124203	
210	ALAD	13.2331110	6.4973504	0.4909919	0.0000004	14.7477365	5.7269156	0.3883251	0.0000000	14.6384401	4.9322206	0.3369362	0.0000000	
375287	RBM43	3.7057678	0.6055981	0.1634204	0.0000000	1.5769960	0.5307170	0.3365367	0.0095139	5.9537637	1.9751765	0.3317526	0.0000001	
255031	FLJ35390	1.9305911	0.6023144	0.3119844	0.0258222	3.4916572	0.9677053	0.2771479	0.0008963	1.7126037	0.4501902	0.3279827	0.1128964	
8406	SRPX	0.5592668	0.1163217	0.2079896	0.2044674	2.7369651	0.4983671	0.1820875	0.0012793	2.3832383	7.0423654	0.3225525	0.0000000	
3202	HOXA5	1.8143981	0.3234651	0.1782768	0.0300391	3.4745413	0.6929248	0.1994291	0.0032831	2.8145308	0.9066331	0.3221258	0.0615958	
55779	WDR52	4.1303397	0.0010000	0.0002421	0.0000000	0.2028085	0.0707804	0.3490010	0.5960009	4.7642285	1.4817610	0.3110180	0.0000101	
11221	DUSP10	3.4274933	0.7403016	0.2159892	0.0000411	1.6829720	0.4405192	0.2617508	0.0125875	6.8504877	2.1210852	0.3096254	0.0000016	
57658	CALCO1	7.5967226	2.7591735	0.3632058	0.0000007	13.3895764	6.5169065	0.4867149	0.0000001	16.6209827	5.0764306	0.3054230	0.0000000	
11254	SILC6A14	8.9073257	2.0426448	0.2293219	0.0000000	0.0485965	0.0010000	0.0205776	0.6792396	0.1771439	0.0532584	0.3066508	0.4809330	
56108	PCDHGA7	0.2249212	0.0010000	0.0044460	0.0664188	0.1435734	0.0010000	0.0069651	0.2681330	0.1744511	0.0524489	0.3006508	0.4806054	

Table SIV. Continued.

GeneID	Symbol	Hep3B	Hep3B-C	Hep3B-C/ Hep3B	Hep3B FDR	Huh7	Huh7-C	Huh7-C/Huh7	Huh7FDR	MHCC97-H	MHCC97-H-C	MHCC97-H MHCC97-H	MHCC97-H-C/ MHCC97-H	FDR
54943	DNAJC28	2.3474385	0.2253429	0.0959952	0.0003150	1.2679064	0.6034099	0.4759105	0.3196420	0.4201608	0.1263217	0.3006508	0.4788349	0.4788349
126205	NLRP8	0.7020926	0.0010000	0.0014243	0.0007343	0.1680619	0.0010000	0.0059502	0.2683816	0.2042063	0.0613948	0.3006508	0.4807457	0.4807457
441027	TMEM150C	0.5486028	0.2282074	0.4159793	0.3778559	0.5836472	0.2444322	0.4188012	0.5018926	0.4255019	0.1279275	0.3006508	0.4785101	0.4785101
440712	Clorf186	1.0367989	0.3881582	0.3743813	0.2204516	0.1323635	0.0010000	0.0075550	0.6837959	1.4474730	0.4351839	0.3006508	0.1383236	0.1383236
4261	CHTA	0.4451062	0.0462887	0.1039948	0.0218754	0.0473539	0.0010000	0.0211176	0.6862185	0.1726144	0.0518967	0.3006508	0.4817304	0.4817304
85495	RPPH1	7.0873262	0.6177530	0.0891384	0.0098516	5.8166179	2.7066740	0.4653347	0.3733562	2.3558578	0.7082905	0.3006508	0.4783248	0.4783248
51284	TLR7	0.4841303	0.2157730	0.4456921	0.2107757	0.0882953	0.0010000	0.0113256	0.4423093	0.1609270	0.0483828	0.3006508	0.4797185	0.4797185
154664	ABCA13	0.0812506	0.0380234	0.4679767	0.3619607	0.0129661	0.0010000	0.0771241	0.6750965	0.0472641	0.0142100	0.3006508	0.4804184	0.4804184
79690	GAL3ST4	0.5437071	0.0010000	0.0018392	0.0273505	0.0867658	0.0010000	0.0115253	0.6752142	0.6325571	0.1901788	0.3006508	0.2572467	0.2572467
9002	F2RL3	0.3792611	0.0010000	0.0026367	0.0664580	0.0806976	0.0010000	0.0123919	0.6778727	0.2941587	0.0884391	0.3006508	0.4807925	0.4807925
440503	PLIN5	3.8188689	1.5885702	0.4159793	0.0060805	0.1805696	0.0010000	0.0055380	0.4426552	0.3291059	0.0989459	0.3006508	0.4799049	0.4799049
51365	PLA1A	9.0597180	3.5638365	0.3933717	0.0001317	0.3771566	0.0010000	0.0026514	0.2678496	2.2913505	0.6888963	0.3006508	0.4046547	0.4046547
390928	PAPL	0.8167551	0.1456085	0.1782768	0.0300266	0.2234389	0.0779804	0.3490010	0.5947574	0.2714929	0.0816246	0.3006508	0.4796583	0.4796583
4163	MCC	3.3415530	0.3723259	0.1114230	0.0000000	0.0253929	0.0010000	0.0393810	0.6779320	0.1851244	0.0556578	0.3006508	0.2573723	0.2573723
284805	C20orf203	0.2677772	0.0556949	0.2079896	0.2033108	0.1139530	0.0010000	0.0087755	0.4389774	0.2076907	0.0624424	0.3006508	0.4781395	0.4781395
10875	FIGL2	0.0808936	0.0010000	0.0123619	0.3672635	0.1032733	0.0010000	0.0096830	0.4434974	0.3764515	0.1113804	0.3006508	0.2572781	0.2572781
83468	GLT8D2	0.3678786	0.0010000	0.0027183	0.1594070	1.9960300	0.4917293	0.2463536	0.0197343	0.4279955	0.1286772	0.3006508	0.4812141	0.4812141
2796	GNRH1	0.3211665	0.1001990	0.3119844	0.3827090	0.2050095	0.0010000	0.0048778	0.4404901	1.8682500	0.5616908	0.3006508	0.4046399	0.4046399
158866	ZDHC15	0.4572144	0.1069828	0.2339883	0.0361791	0.1824079	0.0763926	0.4188012	0.5024244	0.1329825	0.0399813	0.3006508	0.4808393	0.4808393
79469	DLEU2L	0.8334437	0.0010000	0.0011998	0.0272327	0.6650126	0.2785081	0.4188012	0.5019457	0.4848205	0.1457616	0.3006508	0.4786492	0.4786492
130872	AHSA2	11.7938907	0.9072765	0.0769277	0.0000000	2.4750793	0.6478539	0.2617508	0.0052594	22.3047659	6.4422283	0.2888274	0.0000000	0.0000000
9310	ZNF235	2.3810623	0.6753222	0.2836222	0.0010647	0.6217764	0.2893341	0.4653347	0.3735536	1.5949428	0.4542829	0.2888274	0.0000000	0.0000000
114907	FBXO32	0.4557809	0.1421966	0.3119844	0.3829142	0.4364063	0.0010000	0.0022914	0.2673902	19.7964619	5.5798328	0.2818601	0.0000000	0.0000000
6539	SLC6A12	4.4053185	0.9588773	0.2176636	0.0000001	2.4850555	0.6847000	0.0275527	0.0000000	3.5757307	1.0033765	0.2806074	0.0000435	0.0000435
11148	HHLA2	3.1150740	0.5669152	0.1819909	0.0000258	2.9826567	0.9542043	0.3199176	0.0017759	53.9591801	14.6187425	0.2709223	0.0000000	0.0000000
137872	ADHFE1	0.7287684	0.0010000	0.0013722	0.0271898	0.4422633	1.2176462	0.4985729	0.1534421	1.4131003	0.3823647	0.2705857	0.0898981	0.0898981
80206	FHD03	4.2615330	0.0871824	0.0204580	0.0000074	0.0692600	0.0010000	0.0224244	0.6788230	1.0837009	0.2932340	0.2705857	0.0908062	0.0908062
10027228	LOC100272228	1.4105287	0.0010000	0.0007090	0.0000004	0.0692600	0.0010000	0.0144384	0.6725180	2.8612838	0.7590416	0.2652801	0.0003138	0.0003138
397	ARHGDI3	0.8517780	0.1771610	0.2079896	0.2037897	0.9061891	0.1897565	0.2094006	0.2724887	56.3752628	14.8968164	0.2642438	0.0000000	0.0000000
643763	LOC643763	0.4904177	0.0306005	0.0623969	0.0008351	0.0626094	0.0010000	0.0159720	0.4411276	0.9128949	0.2401547	0.2630694	0.0031204	0.0031204
94241	TP53INP1	20.4060958	1.8298590	0.0896722	0.0000000	1.7159703	0.7349834	0.4283194	0.0063853	6.8236913	1.7951046	0.2630694	0.0000000	0.0000000
8832	CD84	0.4223291	0.1317601	0.3119844	0.2184279	0.0673961	0.0010000	0.0148377	0.6739220	0.5732347	0.1477230	0.2577007	0.1681856	0.1681856
11279	KLF8	0.4459823	0.0010000	0.0022422	0.0018223	0.0406690	0.0010000	0.0245888	0.6854293	1.3836335	0.3565633	0.2577007	0.0010686	0.0010686
92104	TTC30A	1.1091905	0.2307001	0.2079896	0.0018794	2.2656862	1.0872493	0.4798764	0.0119978	3.6132571	0.9311388	0.2577007	0.0000002	0.0000002
3434	IFIT1	3.1555476	0.6949283	0.2202243	0.0011810	1.8349337	0.1240559	0.0581668	0.0003104	2.0155672	0.5194130	0.2577007	0.0308742	0.0308742
6398	SECTM1	11.6496760	2.3600764	0.2025873	0.0000000	1.8349337	0.6066888	0.3306325	0.0388717	1.6428374	0.4233603	0.2577007	0.0309212	0.0309212
196385	DNAH10	0.0504831	0.0017499	0.3119844	0.3835311	0.0161124	0.0620641	0.0620641	0.6722846	1.0370432	0.0353161	0.2577007	0.1681393	0.1681393
384	ARG2	13.0778043	4.2432743	0.3244638	0.0000000	51.6458221	10.3718243	0.2008260	0.0000000	4.8687727	1.2198336	0.2505423	0.0001232	0.0001232
4585	MUC4	0.0412885	0.0010000	0.0242198	0.1571339	0.0131778	0.0010000	0.0758853	0.6614931	2.1455905	0.5343519	0.2490465	0.0000000	0.0000000
150696	PROM2	0.4516667	0.1690956	0.3743813	0.2203000	0.1153245	0.0010000	0.0086712	0.4434478	0.7706979	0.1895817	0.2459870	0.0572454	0.0572454
89797	NAV2	8.0955686	1.1943192	0.1475275	0.0000000	2.1832215	0.3355361	0.1536885	0.0000000	3.8961899	0.9438938	0.2439242	0.0000000	0.0000000
440253	WHAMML2	1.7772848	0.1232189	0.0693259	0.0000000	0.2941270	0.0010000	0.0087863	0.2519477	1.5626992	0.3683921	0.2327619	0.0002515	0.0002515
9370	ADIPOQ	0.3770795	0.1882287	0.4991751	0.3601966	0.0481401	0.0010000	0.0207727	0.6674772	0.4679467	0.1055164	0.2254881	0.1057281	0.1057281
7399	USH2A	0.0548516	0.0228171	0.4159793	0.3782355	0.0116711	0.0010000	0.0856818	0.6686293	0.0567246	0.0127907	0.2254881	0.3141176	0.3141176
6326	SCN2A	0.6624513	0.0729439	0.1101122	0.0000515	0.0248742	0.0010000	0.0402023	0.6665010	0.2417901	0.0545208	0.2254881	0.1057120	0.1057120
151258	SLC38A11	1.0649415	0.1328981	0.1247938	0.0472262	0.4078689	0.0010000	0.0024518	0.2683105	0.6607835	0.1489988	0.2254881	0.3144782	0.3144782
100134368	LOC100134368	1.0988352	0.2742556	0.2495876	0.1178358	0.7014169	0.0010000	0.0014257	0.0913265	0.6818141	0.1537410	0.2254881	0.3146397	0.3146397
64922	LRRCC19	0.3836156	0.1795231	0.4679767	0.3620734	0.1224362	0.0010000	0.0081675	0.4437954	0.2975361	0.0670908	0.2254881	0.3146397	0.3146397

Table SIV. Continued.

GeneID	Symbol	Hep3B	Hep3B-C	Hep3B-C/ Hep3B	Hep3B FDR	Huh7	Huh7-C	Huh7-C/Huh7	Huh7FDR	MHCC97-H	MHCC97-H-C	MHCC97-H/ MHCC97-H	MHCC97 FDR
3026	HABP2	28.9427670	2.9266199	0.1011175	0.0000000	204.8311649	19.1904350	0.0936890	0.0000000	9.4939454	2.0807499	0.2191660	0.0000000
10205	MPZL2	43.9486214	7.9056064	0.1798829	0.0000000	22.1564621	7.1445950	0.3224610	0.0000000	19.7561247	4.2470353	0.2149731	0.0000000
9185	REFS2	0.1302354	0.0541752	0.4159793	0.3786158	0.2771095	0.0870403	0.3141009	0.1573770	0.5724007	0.1214772	0.2122241	0.0073259
144608	C12orf60	3.0661992	1.5305703	0.4991751	0.1846784	0.9786198	0.0010000	0.0010218	0.0912008	3.0916274	0.6435001	0.2081428	0.0217806
4515	MTCPI	0.2976328	0.0928568	0.3119844	0.3842976	0.7599489	0.2983758	0.3926261	0.3174358	4.0398222	0.8328519	0.2061605	0.0000339
10402	ST3GAL6	3.9570663	0.4115144	0.1039948	0.0000000	1.6839365	0.7713504	0.4580638	0.1786523	2.8133787	0.7767122	0.2049892	0.0014903
90102	PHLDB2	7.1023687	2.5675473	0.3615058	0.0000000	2.1228941	0.2637074	0.1242207	0.0000000	8.6564791	1.7744844	0.2049892	0.0000000
8564	KMO	0.5507542	0.0010000	0.0018157	0.0007337	0.1318356	0.0010000	0.0075852	0.2675667	0.4805668	0.0963219	0.2004339	0.0648504
5218	CDK14	8.2253132	2.0007425	0.2432421	0.0000000	2.2247647	1.0249075	0.4606813	0.0067657	3.6764001	0.7314568	0.1989601	0.0000000
1806	DPYD	2.0185754	0.3391038	0.1679916	0.0000063	3.1221648	0.6226507	0.1994291	0.0000000	3.0108219	0.5974359	0.1984295	0.0000003
343450	KCNT2	3.3888533	0.3645757	0.1075808	0.0000000	0.2610757	0.1171487	0.4487156	0.4328249	1.6767562	0.3269955	0.1950167	0.0000121
83464	APH1B	0.4118011	0.0513902	0.1247938	0.0471928	3.4698050	0.4953949	0.1427731	0.0000000	3.2578501	0.6337780	0.1945387	0.0000002
27115	PDE7B	0.1281804	0.0399903	0.3119844	0.3852453	0.1636422	0.0428335	0.2617508	0.4125008	1.3918526	0.2690110	0.1932755	0.0001785
23015	GOLGA8A	0.1587862	0.0010000	0.0062978	0.0661648	0.4392162	0.1414956	0.3221548	0.0984468	1.3547175	0.2591889	0.1913232	0.0000356
5744	PTHLH	5.8986274	0.2300350	0.0389981	0.0000000	0.7059857	0.0010000	0.0014165	0.0520454	48.1808340	9.1555903	0.1900256	0.0000000
627	BDNF	0.0726086	0.0010000	0.0137725	0.3655305	0.5098290	0.0485266	0.0951821	0.0149768	1.1263197	0.2031773	0.1803905	0.0015667
283629	TSSK4	2.1973208	0.5141474	0.2339883	0.0361903	0.1753263	0.0010000	0.0057037	0.6809112	1.0651651	0.1921456	0.1803905	0.0000000
1368	CPM	2.3824911	0.5170784	0.2170327	0.0000000	5.2236513	1.5230624	0.2915705	0.0000000	1.8077126	0.3260941	0.1803905	0.0000000
26206	SPAG8	0.3437074	0.0010000	0.0029095	0.1585240	0.1096989	0.0010000	0.0091159	0.6732193	0.6664572	0.1202225	0.1803905	0.1965033
3762	KCNJ5	2.9773546	0.8917328	0.2995051	0.0007003	0.3801055	0.1591887	0.4188012	0.5023712	1.3855597	0.2499418	0.1803905	0.0078604
152110	NEK10	2.2249123	0.6533064	0.2936324	0.0051946	0.5012552	0.0874693	0.1745005	0.1772482	0.5075483	0.0915569	0.1803905	0.1961405
1010	CDH12	4.2918319	1.5373529	0.3582044	0.0000072	0.1014665	0.0010000	0.0098555	0.4409313	0.3082211	0.0556001	0.1803905	0.1961664
55336	FBXL8	0.4318374	0.1347266	0.3119844	0.3824163	0.4134807	0.0010000	0.0024185	0.2670027	0.8373436	0.1510488	0.1803905	0.1960629
345557	PLCXD3	0.4907345	0.0278366	0.0567244	0.0003597	0.0284772	0.0010000	0.0351158	0.6812105	2.2837117	0.4057180	0.1776573	0.0000000
55638	SYBU	1.9192627	0.2661245	0.1386598	0.0000817	2.2460504	0.4275676	0.1903642	0.0000919	16.5399937	2.9090658	0.1758807	0.0000000
131583	FAM43A	8.2334030	2.9454354	0.2133057	0.0000001	0.7007478	0.2934740	0.4188012	0.2725578	7.0670739	10.2877545	0.1738703	0.0000000
1942	EFNA1	69.0067131	14.7195222	0.3743422	0.0000000	31.2423448	8.2513803	0.2641089	0.0000000	62.4141839	1.4487646	0.1680350	0.0000000
79812	MMRN2	0.2479679	0.1031495	0.4159793	0.3776809	0.0527616	0.0010000	0.0189532	0.6587371	2.1796995	0.3469385	0.1591681	0.0000070
5256	PHKA2	22.9520992	6.0683880	0.2643936	0.0000000	24.2941044	12.0463511	0.4958549	0.0000000	15.5892159	2.4492884	0.1571143	0.0000000
716	C1S	12.4183253	5.5237891	0.4448095	0.0000003	0.8633323	0.0821738	0.0951821	0.0149734	59.7933143	9.2034880	0.1539217	0.0000000
56918	C2orf83	0.9925847	0.1032237	0.1039948	0.0218519	0.3167971	0.1105625	0.3490010	0.5954081	1.5397173	0.2314586	0.1503254	0.0000000
11174	ADAMTS6	0.9025628	0.0889218	0.0985214	0.0000107	0.1516134	0.0317479	0.2094006	0.2730599	2.2210643	0.0332316	0.1503254	0.1175961
342908	ZNF404	1.1246060	0.3508596	0.3119844	0.1262844	0.2392890	0.0010000	0.0041790	0.4425563	3.4890228	0.5244887	0.1503254	0.00001783
166348	KBTBD12	0.6553797	0.2453619	0.3743813	0.0760670	0.2510082	0.0876021	0.3490010	0.3651483	0.6099829	0.0916959	0.1503254	0.0136881
9153	SILC28A2	0.2803524	0.0874656	0.3119844	0.3848894	0.1789567	0.0010000	0.0055879	0.4449915	5.0012160	0.6864350	0.1372536	0.0000000
11209	MST1P2	7.2064409	0.7358064	0.1021040	0.0000000	0.4181882	0.0010000	0.0023913	0.0911851	0.77113767	0.0916611	0.1288503	0.0690757
79957	PAQR6	3.0986427	0.6105653	0.1970428	0.0003108	0.3123407	0.1089957	0.3490010	0.5963572	0.8854405	0.1140893	0.1288503	0.0690985
494513	DFNB59	2.9508892	0.2832712	0.0959952	0.0003150	0.7244747	0.0010000	0.0013803	0.0913737	1.2323981	0.1587949	0.1288503	0.0691669
2256	FGF11	5.7224426	0.3173890	0.0554639	0.0000000	1.9481564	0.8498857	0.4362513	0.0652891	3.0575534	0.3558410	0.1163809	0.0000031
64168	NECAB1	0.7390143	0.2515210	0.3403467	0.0449544	0.4288484	0.0898011	0.2094006	0.0739502	1.6153449	0.1879954	0.1163809	0.0000031
3433	IFT2	1.4817770	0.1849165	0.1247938	0.0002413	0.3152864	0.1320423	0.4188012	0.5017332	0.8388498	0.2073194	0.1127440	0.0000498
283120	H19	7181.3736710	1497.7270621	0.2085572	0.0000000	23.7763917	6.2984702	0.2649044	0.0000000	692.3128979	76.9161099	0.1111002	0.0000000
7042	TGFB2	0.9229629	0.0822714	0.0891384	0.0001415	1.2624701	0.0440603	0.0349001	0.0000003	14.4194509	1.5680580	0.1087460	0.0000000
256764	WDR72	6.3769729	1.3852928	0.2172336	0.0000000	1.2664083	0.4104079	0.3240724	0.0006974	9.8188137	1.0574450	0.1076958	0.0000000
5143	PDE4C	2.1957795	0.6044550	0.2752804	0.0000279	0.5771404	0.1726479	0.2991437	0.0675964	0.8515343	0.0903580	0.1061120	0.00007927
283796	GOLGA8IP	6.5451002	0.4537710	0.0693299	0.0000000	0.4642131	0.0010000	0.0021542	0.1583442	1.2691114	0.1271864	0.1002169	0.0225391
5104	SERPINA5	146.1953719	23.4808819	0.1606130	0.0000000	2.0017686	0.0010000	0.0044996	0.0000055	1.0642059	0.1204667	0.1002169	0.0224989
387496	RASL11A	5.8176312	1.2565457	0.2159892	0.0000411	32.2793602	6.4303241	0.1992085	0.0000000	8.5037864	0.7826541	0.0920360	0.0000000

Table SIV. Continued.

GeneID	Symbol	Hep3B	Hep3B-C	Hep3B-C/ Hep3B	Hep3B FDR	Huh7	Huh7-C	Huh7-C/Huh7	Huh7FDR	MHCC97-H	MHCC97-H-C	MHCC97-H FDR	MHCC97-H-C/ MHCC97-H FDR
7955	STL	0.7105322	0.0806091	0.1134489	0.0015201	0.1236961	0.0010000	0.0080843	0.2682040	0.5009963	0.0451875	0.0901952	0.0126541
10537	UBD	230.0529916	52.2777207	0.2272421	0.0000000	0.2228364	0.0010000	0.0044876	0.6709455	10.8304347	0.9768536	0.0901952	0.0000000
7802	DNALI1	0.1303337	0.0010000	0.0076726	0.3717743	0.1663912	0.0010000	0.0060099	0.4450415	9.1990213	0.8205902	0.0892041	0.0000000
55195	C14orf105	3.0237216	0.0857595	0.0283622	0.0000000	2.7197217	1.2859934	0.4728401	0.0500539	11.2997392	0.9614930	0.0850898	0.0000000
10397	NDRG1	144.8319828	22.3603871	0.1543885	0.0000000	254.0956322	109.6664055	0.4315950	0.0000000	562.5126320	46.7359703	0.0830843	0.0000000
5460	POU5F1	1.2321700	0.0010000	0.0008116	0.0111498	1.4157507	0.4940984	0.3490010	0.2275579	10.225036	0.1723962	0.0819957	0.0069508
8875	VNN2	4.1347789	1.8274811	0.4419788	0.0152908	0.9897538	0.1151417	0.1163337	0.0425518	4.5432160	0.3615674	0.0795840	0.0000001
23460	ABCA6	0.0651915	0.0010000	0.0153394	0.3613403	0.1664541	0.0010000	0.0060077	0.1578379	0.6067579	0.0456056	0.0751627	0.0037835
6506	SLC1A2	0.1437840	0.0717734	0.4991751	0.3602560	1.7805567	0.1537524	0.0863508	0.0000000	0.5576014	0.0402344	0.0721562	0.0000059
100133941	CD24	776.6632041	99.3141801	0.1278729	0.0000000	468.9756389	177.5034923	0.3784919	0.0000000	274.9069870	19.2778471	0.0701250	0.0000000
5139	PDE3A	0.8371824	0.1044752	0.1247938	0.0032838	2.3513454	1.1190299	0.4759105	0.0159628	8.8441252	0.0585662	0.0693809	0.0020549
7145	TNSI	12.0281184	0.5031400	0.0418303	0.0000000	8.7073167	1.7963718	0.2063060	0.0000000	3.8306761	0.2585439	0.0674930	0.0000000
8743	TNFSF10	1.9627859	0.7348304	0.3743813	0.0760964	18.5429267	4.7224459	0.2546764	0.0000000	7.0028396	0.4119279	0.0588230	0.0000000
56892	C8orf4	109.2456847	1.6453840	0.0150613	0.0000000	21.7619854	9.4412420	0.4338410	0.0000000	27.9031409	1.5811918	0.0566672	0.0000000
151887	CCDC80	1.9846573	0.0010000	0.0005039	0.0000000	0.0974509	0.0010000	0.0102616	0.44446919	5.8612574	0.3203985	0.0546638	0.0000000
10384	BTN3A3	4.3465122	2.0523912	0.4721927	0.0045340	1.8746614	0.8636215	0.4606813	0.0763129	1.5489290	0.0821800	0.0530560	0.0001663
221264	AKD1	1.6918667	0.3405434	0.2012803	0.0000036	0.4528940	0.1823775	0.4026935	0.1745524	0.7619483	0.0381801	0.0501085	0.0000874
5915	RARB	1.9249979	0.0706552	0.0367041	0.0000021	0.9396548	0.0010000	0.0010642	0.0007870	7.6408912	0.3168607	0.0414691	0.0000000
3486	IGFBP3	83.8530323	18.0137249	0.2148250	0.0000000	562.8994571	160.8454634	0.2857446	0.0000000	###	45.4412352	0.0394335	0.0000000
4015	LOX	91.2425515	3.4755313	0.0380911	0.0000000	6.9417102	3.3680936	0.4851965	0.0000207	8.0231888	0.3092536	0.0385450	0.0000000
11067	C10orf10	8.0447542	1.8823786	0.2339883	0.0000000	12.6240060	0.0010000	0.0000792	0.0000000	12.6091759	0.4689846	0.0371939	0.0000000
718	C3	2241.0039367	372.1101971	0.1660462	0.0000000	309.6020910	135.3432493	0.4371522	0.0000000	1.3648981	0.0473490	0.0346905	0.0000004
8828	NRP2	0.41445951	0.0520106	0.1254491	0.0043780	0.8601043	0.1039075	0.1208080	0.0000849	9.0439901	0.2900355	0.0320694	0.0000000
3990	LIPC	65.8651712	11.8189801	0.1794420	0.0000000	50.2873936	23.5922747	0.4691489	0.0000000	15.5260426	0.4517339	0.0290952	0.0000000
715	C1R	16.6956787	4.8156756	0.2884384	0.0000000	1.0054069	0.4210656	0.4188012	0.2722735	37.6263730	0.9916713	0.0263558	0.0000000
84913	ATOH8	0.4122788	0.0010000	0.0024255	0.0018180	1.1127867	0.393627	0.3490010	0.5940491	1.6445189	0.0412022	0.0250542	0.0000000
9971	NR1H4	26.5827885	1.6084202	0.0605061	0.0000000	4.7306200	1.6151000	0.3414140	0.0005849	1.65196044	0.3381153	0.0216469	0.0000000
7098	TLR3	0.9082645	0.0708411	0.0779961	0.0043754	0.0724713	0.0010000	0.0137986	0.6712943	3.6984100	0.0794236	0.0214751	0.0000000
744	MPPED2	0.4245175	0.1513633	0.3565536	0.1292421	0.0387116	0.0010000	0.0258320	0.0000000	0.0470372	0.0010000	0.0212598	0.6155701
3131	HLF	8.1395843	1.3081879	0.1607193	0.0000000	18.4605561	4.2447986	0.2299388	0.0000000	0.0478268	0.0010000	0.0209088	0.6168037
7045	TGFBI	140.9325738	35.2518175	0.2501325	0.0000000	168.5298506	16.6991169	0.0990870	0.0000000	31.0264927	0.6027413	0.0194267	0.0000000
84171	LOXL4	20.5811812	4.2414000	0.2060815	0.0000000	37.5444279	7.0668097	0.1882253	0.0000000	3.5147826	0.0660451	0.0187907	0.0000000
4986	OPRK1	0.2784868	0.1303253	0.4679767	0.3613981	0.0444415	0.0010000	0.0225015	0.6597469	0.0539993	0.0010000	0.0185188	0.6001743
91752	ZNF804A	0.0736935	0.0010000	0.0135697	0.3649468	0.5174465	0.1477549	0.2855463	0.1074424	0.0571574	0.0010000	0.0174955	0.6132770
1612	DAPK1	18.9546674	4.0995855	0.2162837	0.0000000	7.9424773	3.5750158	0.4501134	0.0000000	30.7557534	0.5287726	0.0171926	0.0000000
11074	TRIM31	2.2142587	0.1062791	0.0479976	0.0000655	2.5006706	0.0010000	0.0003999	0.0000016	21.6656782	0.3574648	0.0164991	0.0000000
6345	SRL	0.1638605	0.0010000	0.0061028	0.1599389	0.3137900	0.1095130	0.3490010	0.3655918	0.0635459	0.0010000	0.0157367	0.6266315
154822	LOC154822	0.0860553	0.0010000	0.0116204	0.3695500	0.0549315	0.0010000	0.0182045	0.6794779	0.0667454	0.0010000	0.0149823	0.6192858
7104	TM4SF4	311.1638252	68.1886231	0.2191406	0.0000000	239.6766099	89.3567278	0.3782221	0.0000000	22.6902537	0.3382732	0.0149083	0.0000000
114792	KLHL32	0.3627571	0.0010000	0.0027567	0.0272413	0.0578895	0.0010000	0.0172743	0.6648423	0.0703395	0.0010000	0.0142168	0.6058242
912	CD1D	0.1825292	0.0010000	0.0054786	0.1588251	0.0582567	0.0010000	0.0171654	0.6759801	0.0707858	0.0010000	0.0141271	0.6163204
220965	FAM13C	0.1946738	0.0607352	0.3119844	0.3820948	0.3106642	0.0650533	0.2094006	0.2721684	0.0754955	0.0010000	0.0132458	0.6004798
100129792	CCDC152	0.7911866	0.1234189	0.1559922	0.0146829	0.0631295	0.0010000	0.0158404	0.6849445	0.0767065	0.0010000	0.0130367	0.6264097
54463	FAM134B	0.1067246	0.0010000	0.0093699	0.3625729	0.0681253	0.0010000	0.0146788	0.6682256	0.0827767	0.0010000	0.0120807	0.6090558
201625	DNAH12	0.0723651	0.0010000	0.0138188	0.1569513	1.2010092	0.5803663	0.4832322	0.0090192	0.0841907	0.0010000	0.0118778	0.2049170
89832	CHRFAM7A	0.3624080	0.0753771	0.2079896	0.2036831	0.0771117	0.0010000	0.0129682	0.6649564	0.0936958	0.0010000	0.0106728	0.6061355
8701	DNAH11	0.1946601	0.0010000	0.0051372	0.0007348	0.0155321	0.0010000	0.0643827	0.6855506	0.0943627	0.0010000	0.0105974	0.6008678
1277	COL1A1	0.1165021	0.0363468	0.3119844	0.3836783	0.6692987	0.2725169	0.4071678	0.0973039	4.0210296	0.0407503	0.0101343	0.0000000



Table SIV. Continued.

GeneID	Symbol	Hep3B	Hep3B-C	Hep3B-C/ Hep3B	Hep3B FDR	Huh7	Huh7-C	Huh7-C/Huh7	Huh7FDR	MHCC97-H	MHCC97-H-C	MHCC97-H MHCC97-H	MHCC97-H-C/ MHCC97-H	FDR
171389	NLRP6	0.2577484	0.0804135	0.3119844	0.3830903	0.0822640	0.0010000	0.0121560	0.6676497	0.0999561	0.0010000	0.0100044	0.0100044	0.6085323
283856	LOC283856	0.5156894	0.0010000	0.0019392	0.0272527	0.0822947	0.0010000	0.0121515	0.6656992	0.0999935	0.0010000	0.0100007	0.0100007	0.6066029
100131454	DBIL5P	0.5158820	0.2414207	0.4679767	0.3618480	0.0823254	0.0010000	0.0121469	0.6710617	0.1000308	0.0010000	0.0099969	0.0099969	0.6123221
340307	CTAGE6P	0.1296972	0.0010000	0.0077103	0.3610834	0.0827893	0.0010000	0.0120789	0.6658709	0.1005945	0.0010000	0.0099409	0.0099409	0.6066549
56896	DPYSL5	0.1988409	0.0413568	0.2079896	0.2043780	1.2269477	0.0442972	0.0361036	0.0000005	0.1028153	0.0010000	0.0097262	0.0097262	0.3665319
55422	ZNF331	17.2526321	1.2147395	0.0704089	0.0000000	15.5979407	5.0689166	0.3250312	0.0000000	0.1041347	0.0010000	0.0096029	0.0096029	0.3647002
4807	NHLHI	0.1349176	0.0010000	0.0074119	0.3571893	0.6889728	0.2705087	0.3926261	0.3172753	0.1046434	0.0010000	0.0095563	0.0095563	0.6034486
553137	LOC553137	25.9853525	0.8764352	0.0337280	0.0000000	14.6146403	0.8448721	0.0578100	0.0000000	0.1089432	0.0010000	0.0091791	0.0091791	0.6019094
283050	LOC283050	0.2839260	0.0010000	0.0035220	0.1593005	0.2718567	0.0948783	0.3490010	0.5964760	0.1101079	0.0010000	0.0090820	0.0090820	0.6196110
151295	SLOC23A3	0.5716126	0.0010000	0.0017494	0.0273649	0.2736571	0.0010000	0.0036542	0.2684882	0.1108371	0.0010000	0.0090222	0.0090222	0.6179344
4093	SMAD9	1.9074809	0.4577726	0.2399880	0.0069985	0.1873227	0.0010000	0.0053384	0.4422600	0.1138047	0.0010000	0.0087870	0.0087870	0.6107373
1592	CYP26A1	0.3075760	0.0010000	0.0032512	0.1572465	2.3560109	0.0010000	0.0004244	0.0000008	0.1192795	0.0010000	0.0083837	0.0083837	0.6034486
26253	CLEC4E	0.3199759	0.0010000	0.0031252	0.1596190	0.1021247	0.0010000	0.0097919	0.6818700	0.1240883	0.0010000	0.0080588	0.0080588	0.6227726
84931	LOC84931	0.5140259	0.1069120	0.2079896	0.2037541	0.2187446	0.0010000	0.0045715	0.4410785	0.1328945	0.0010000	0.0075248	0.0075248	0.6069670
100125288	ZGLP1	0.5231122	0.0010000	0.0019116	0.0664973	0.1113057	0.0010000	0.0089843	0.6789420	0.1352437	0.0010000	0.0073941	0.0073941	0.6189609
710	SERPING1	91.8453001	7.9990984	0.0870932	0.0000000	415.8845636	64.4346040	0.1549339	0.0000000	0.1362068	0.0010000	0.0073418	0.0073418	0.6269645
1880	GPR183	1.7407766	0.0010000	0.0005745	0.0002939	0.1234651	0.0010000	0.080995	0.6702489	0.150182	0.0010000	0.006659	0.006659	0.6111063
81607	PVR14	0.1971753	0.0010000	0.0050716	0.1592138	0.0629312	0.0010000	0.0158904	0.6790610	0.1529312	0.0010000	0.0065389	0.0065389	0.3666520
1101	CHAD	0.6110691	0.2541921	0.4159793	0.3784402	0.1300208	0.0010000	0.0076911	0.6707712	0.1579838	0.0010000	0.0063298	0.0063298	0.6120045
25789	TMEM59L	0.8530056	0.3991867	0.4679767	0.3615386	2.5863611	0.1425225	0.0551054	0.0001752	0.1653999	0.0010000	0.0060460	0.0060460	0.6050475
400831	C20orf202	0.2152457	0.0010000	0.0046459	0.3578605	0.2747945	0.0010000	0.0036391	0.4391234	0.1669467	0.0010000	0.0059899	0.0059899	0.6011937
56109	PCDHGA6	0.2998949	0.0010000	0.0033344	0.0272728	0.0478578	0.0010000	0.0208952	0.6674197	0.1744511	0.0010000	0.0057323	0.0057323	0.2054193
2743	GLRB	0.6774114	0.2113418	0.3119844	0.1262609	0.5044789	0.0754558	0.1495719	0.1122885	0.1751357	0.0010000	0.0057099	0.0057099	0.3629260
401335	C7orf65	0.3558097	0.0740047	0.2079896	0.2043422	0.0757077	0.0010000	0.132087	0.6784664	0.1839797	0.0010000	0.0054354	0.0054354	0.3664119
383	ARG1	20.2809903	3.8708515	0.1908611	0.0000000	0.9138294	0.1594637	0.1745005	0.1775107	0.1850605	0.0010000	0.0054036	0.0054036	0.6260773
652995	UCA1	6.3483769	0.0010000	0.0001575	0.0000000	590.7071197	5.3851135	0.0091164	0.0000000	0.1893794	0.0010000	0.0052804	0.0052804	0.6135959
90246	LOC90246	6.2773461	0.1566747	0.0249588	0.0000000	0.0801401	0.0010000	0.124782	0.6851868	0.1947509	0.0010000	0.0051348	0.0051348	0.3692329
645843	TMEM14E	0.2670178	0.0010000	0.0037451	0.3622855	0.1704448	0.0010000	0.0058670	0.6677073	0.2071017	0.0010000	0.0048285	0.0048285	0.6085846
50856	CLEC4A	0.5390383	0.0010000	0.0018552	0.1588682	0.1720415	0.0010000	0.0058126	0.6760980	0.2090418	0.0010000	0.0047837	0.0047837	0.6165888
9744	ACAP1	0.6880312	0.1717240	0.2495876	0.1178028	0.2635136	0.0010000	0.0037949	0.2685594	0.2134576	0.0010000	0.0046848	0.0046848	0.3663319
7151	TOPI1	0.5690219	0.1775260	0.3119844	0.2181268	0.0908056	0.0010000	0.110125	0.6634758	0.2206695	0.0010000	0.0045317	0.0045317	0.3620649
339483	MTMR9LP	0.2972484	0.0010000	0.0033642	0.1574156	0.0948709	0.0010000	0.105406	0.6640445	0.2305489	0.0010000	0.0043375	0.0043375	0.3621821
204010	RPSAP52	0.6051780	0.0010000	0.0016524	0.1591561	0.1931509	0.0010000	0.0051773	0.6787636	0.2346911	0.0010000	0.0042609	0.0042609	0.6186364
326	AIRE	0.3059407	0.0010000	0.0032686	0.1598952	0.0976452	0.0010000	0.102412	0.6852474	0.2372906	0.0010000	0.0042142	0.0042142	0.3692735
3674	ITGA2B	0.8284440	0.1938462	0.2339883	0.0361642	0.1983070	0.0692093	0.3490010	0.5950530	0.2409561	0.0010000	0.0041501	0.0041501	0.2060041
119369	NUDT9P1	0.3220653	0.0010000	0.0031050	0.3608269	0.4111664	0.0010000	0.0024321	0.4407841	0.2497971	0.0010000	0.0040032	0.0040032	0.6063431
80128	TRIM46	1.2087188	0.1371278	0.0015197	0.0015197	0.2104251	0.0010000	0.0047523	0.2678142	0.2556803	0.0010000	0.0039111	0.0039111	0.2059508
9080	CLDN9	1.6841660	0.5254336	0.3119844	0.0433020	0.6450298	0.2251161	0.3490010	0.3652813	0.2612512	0.0010000	0.0038277	0.0038277	0.3654148
128346	C1orf162	0.7530077	0.0010000	0.0013280	0.1568672	0.4806656	0.0010000	0.020804	0.4390261	0.2920202	0.0010000	0.0034244	0.0034244	0.6006836
200197	C1orf126	0.4452976	0.0617448	0.1386598	0.0070155	0.1579143	0.0330673	0.2094006	0.2729169	0.3070020	0.0010000	0.0032573	0.0032573	0.0086917
144486	LOC144486	0.4039634	0.0010000	0.0024755	0.0661972	0.4297683	0.1799875	0.4188012	0.5022647	0.3133181	0.0010000	0.0031916	0.0031916	0.2057113
51129	ANGPT14	2.3585404	0.1132043	0.0047976	0.0000656	45.8605018	21.3404814	0.4653347	0.0000000	0.82881708	0.2538382	0.0030627	0.0030627	0.0000000
124093	CCDC78	0.6433305	0.1338061	0.2079896	0.2039498	0.6844261	0.1433192	0.2094006	0.2725956	0.3326491	0.0010000	0.0030062	0.0030062	0.3639490
1582	CYP8B1	0.2622183	0.1090774	0.4159793	0.3786451	0.1673812	0.0584162	0.3490010	0.5952897	0.3389652	0.0010000	0.0029502	0.0029502	0.60607439
440356	LOC440356	1.8123571	0.5654272	0.3119844	0.2182396	0.20245359	0.9084408	0.4487156	0.4329232	0.3514206	0.0010000	0.0028456	0.0028456	0.6086369
389812	LCN15	2.2654464	0.5654272	0.20495876	0.1177258	6.6520464	2.7253223	0.4096968	0.0545116	0.3514206	0.0010000	0.0028456	0.0028456	0.6095803
163175	LG14	21.7576988	0.0454284	0.0034284	0.0000000	2.2130092	0.3195900	0.1444142	0.0000662	0.296171910	0.0036312	0.0028186	0.0028186	0.0000000
3623	INHA	4.3672330	0.3027797	0.0693299	0.0000053	0.9292418	0.1621532	0.1745005	0.1773531	0.3763633	0.0010000	0.0026570	0.0026570	0.3660922



Table SIV. Continued.

GeneID	Symbol	Hep3B	Hep3B-C	Hep3B-C/ Hep3B	Hep3B FDR	Huh7	Huh7-C	Huh7-C/Huh7	Huh7FDR	MHCC97-H	MHCC97-H-C	MHCC97-H-C/ MHCC97-H	MHCC97-H-C/ MHCC97-H FDR
1748	DLX4	1.2029757	0.2144627	0.1782768	0.0300109	4.3879580	1.8376821	0.4188012	0.0083133	0.3998743	0.0010000	0.0025008	0.2054724
55259	CASC1	0.1308772	0.0010000	0.0076408	0.3592952	0.0835425	0.0010000	0.0119700	0.6633054	0.4060387	0.0010000	0.0024628	0.1127655
768	CA9	41.1016708	6.2382560	0.1517762	0.0000000	37.7235909	8.0181297	0.2125495	0.0000000	78.2324674	0.1554228	0.0019867	0.0000000
202134	FAM153B	0.6591962	0.0010000	0.0015170	0.0272785	0.1051958	0.0010000	0.0095061	0.6685139	0.5112792	0.0010000	0.0019559	0.1129173
100128573	LOC100128573	3.3007078	0.4119078	0.1247938	0.0471357	0.8427732	0.0010000	0.0011866	0.4397081	0.5120124	0.0010000	0.0019531	0.6026267
54518	APBB1P	0.6546341	0.0010000	0.0015276	0.0111212	15.3776545	0.0010000	0.0000650	0.0000000	0.6092890	0.0010000	0.0016413	0.0319863
286359	LOC286359	0.8567098	0.0010000	0.0011673	0.0111710	0.1093723	0.0010000	0.0091431	0.6848840	0.6644727	0.0010000	0.0015050	0.0608471
3827	KNG1	125.2691629	8.0271178	0.0640790	0.0000000	9.7515570	2.1494546	0.2204217	0.0000000	0.7483442	0.0010000	0.0013363	0.0320044
1551	CYP3A7	4.6476505	0.3107131	0.0668538	0.0000000	0.6357265	0.0010000	0.0015730	0.0520754	0.7724495	0.0010000	0.0012946	0.0319803
11223	MST1P9	1.0997853	0.0010000	0.0009093	0.0000030	0.1002891	0.0010000	0.0099712	0.4449415	0.7920756	0.0010000	0.0012625	0.0002962
259296	TAS2R50	0.6905081	0.0010000	0.0014482	0.1587963	0.2203852	0.0010000	0.0045375	0.6755674	0.8033475	0.0010000	0.0012448	0.2061108
3490	IGFBP7	0.6220793	0.0010000	0.0016075	0.1586099	9.7287156	0.4157549	0.0427348	0.0000000	1.2062275	0.0010000	0.0008290	0.0607336
1427	CRYGS	4.5104446	0.2558525	0.0567244	0.0003594	0.2617401	0.0010000	0.0038206	0.6722262	1.2721259	0.0010000	0.0007861	0.1131034
91353	IGLL3P	4.1551361	0.0010000	0.0002407	0.0000468	0.2411217	0.0010000	0.0041473	0.6740393	1.4648933	0.0010000	0.0006826	0.0607130
158056	MAMDC4	1.0376487	0.0588600	0.0567244	0.0003594	0.2408581	0.0630448	0.2617508	0.4116917	1.7559508	0.0010000	0.0005695	0.0000001
128872	HMG3P1	3.1103967	0.2425988	0.0779961	0.0043733	0.2481815	0.0010000	0.0040293	0.6635895	1.8093412	0.0010000	0.0005527	0.0319562
9227	LRAT	1.0594948	0.0881456	0.0831959	0.0000629	0.0450870	0.0010000	0.0221793	0.6637032	2.1365625	0.0010000	0.0004680	0.0000000
7018	TF	3112.9462124	1443.7750073	0.4637970	0.0000000	667.3354803	137.7694712	0.2064471	0.0000000	265.9341292	0.1041963	0.0003918	0.0000000
112399	EGLN3	3.9319894	1.4245775	0.3623045	0.0008815	16.5167445	3.7298802	0.2258242	0.0000000	2.6561820	0.0010000	0.0003765	0.0000000
641522	ARL17B	0.7074878	0.0010000	0.0014135	0.3695798	0.4516090	0.0010000	0.0022143	0.6795375	2.7436731	0.0010000	0.0003645	0.0607748
441054	C4orf47	2.4812918	0.0010000	0.0004030	0.0018202	0.9050726	0.0010000	0.0011049	0.1581510	3.5740991	0.0010000	0.0002798	0.0002961
3426	CFI	46.0125691	10.6667153	0.2318218	0.0000000	15.1954619	5.9794824	0.3935045	0.0000000	19.8265617	0.0010000	0.0000504	0.0000000