

Figure S1.

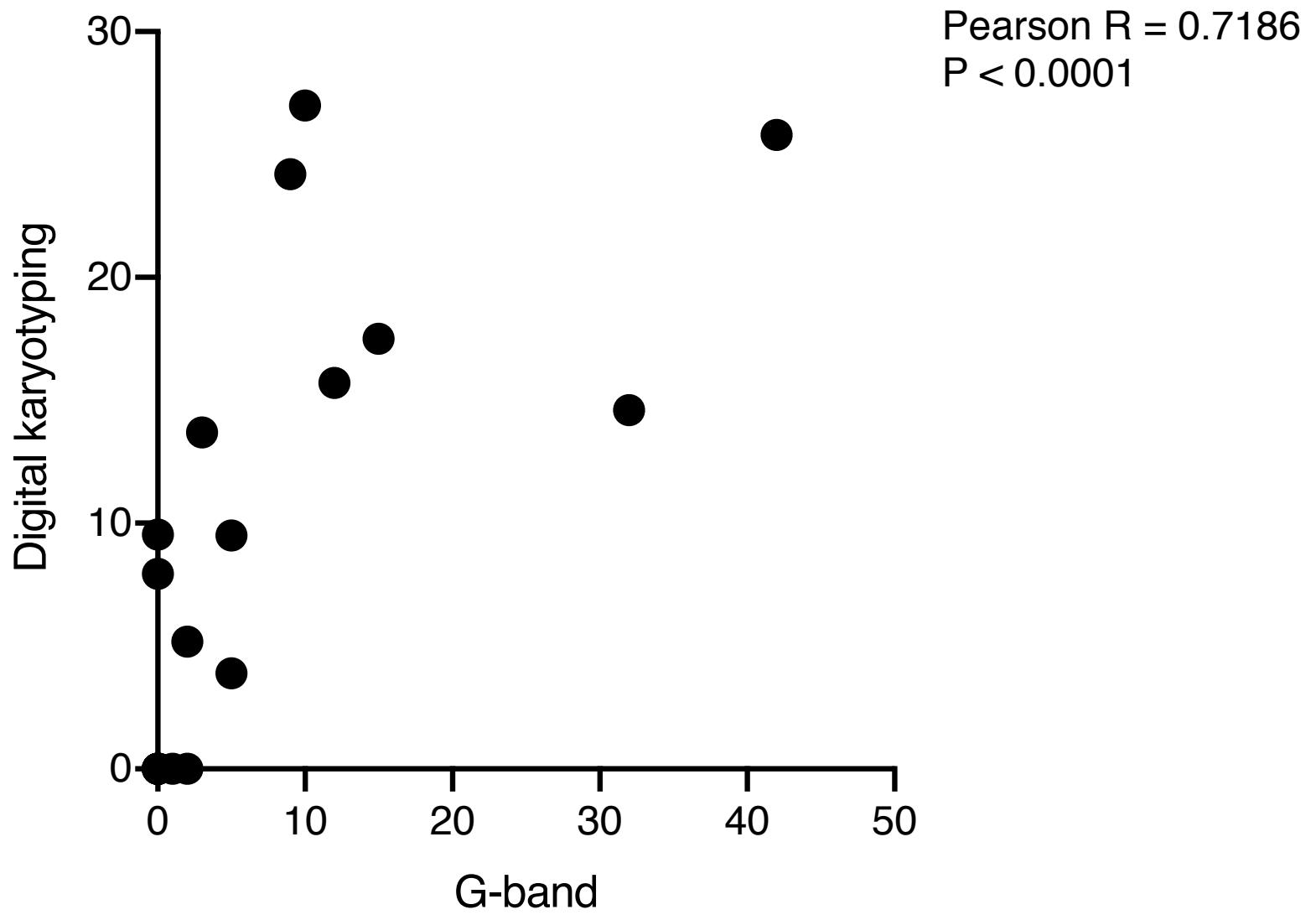


Figure S2.

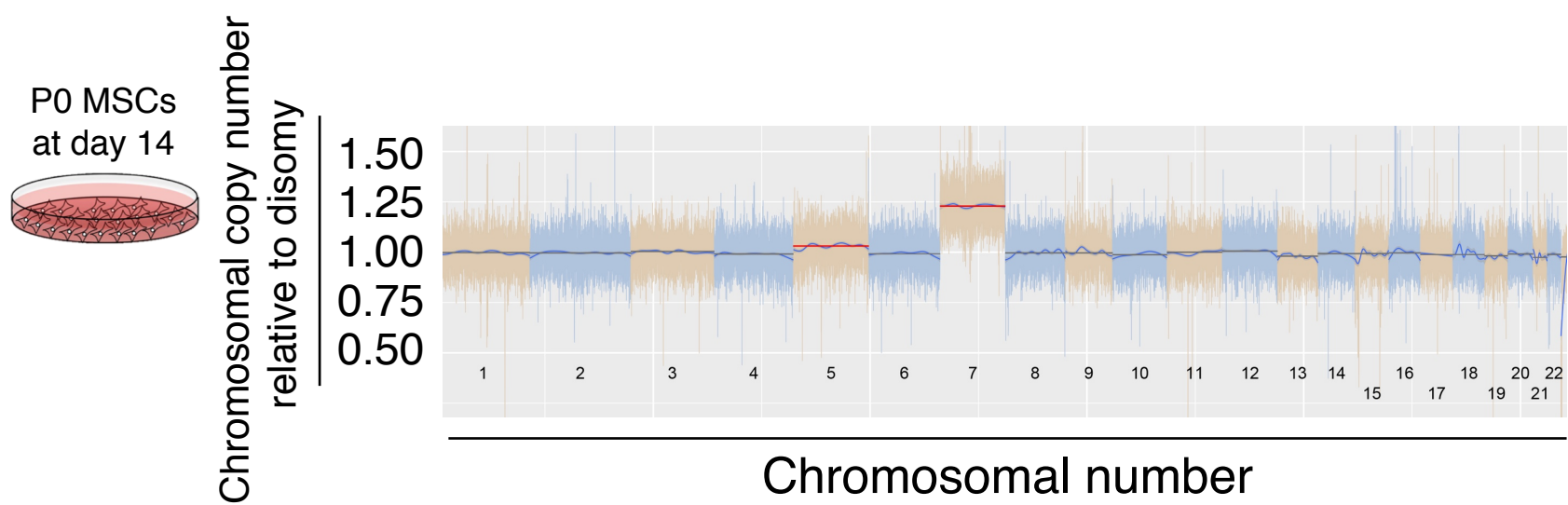
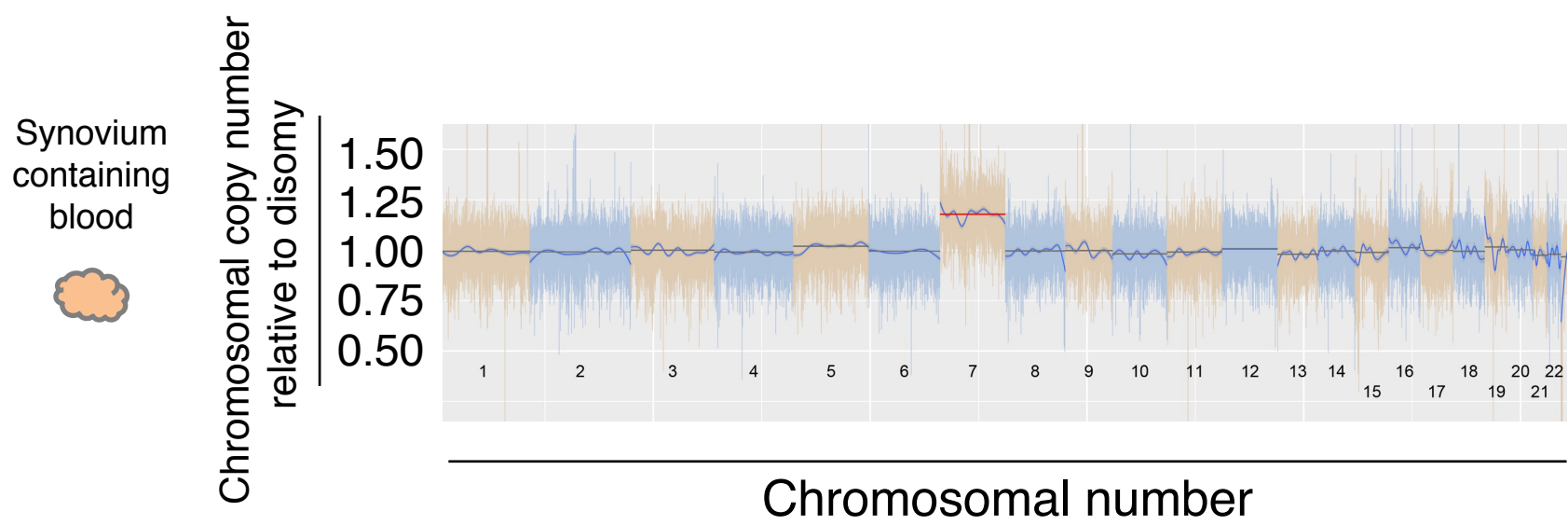


Table S1.

Karyotype abnormalities by G-banding.

ID	P0: 20~50 cells	P2 : 100 cells	P5 : 100 cells	P10: 100 cells	P15 : 100 cells
01	+7 [1], +7 +7 [1], +7 +Y +16 [1], + Y[1]	+7 [2]	NA	+7 [5], -Y [2] +10 [21]	+10 [75] -Y [11]
02	+3 [1/50], +5, +7, -21, -22 [1/50]	inv (X) (p11. 2q28) [1], 1, X t(q11.2;p34.3) [1]	+7 [2], +5, +7, +8 [1], +13 [1], 7, 20 t(q22;q13.3)	3, 4t(p21;p16) [1/100]	Normal
03	Normal	+5 [1], +7 [1], +8 [1], +9, +12 [1]	+7 [2]	+7 [32]	+7 [1], 1, 22 t(p32;q11.2) [1] 2, 15 t(q13;q22) [1]
04	+7 [2/30], +12 [1/30]	1, 16 t (p10;q10) [1], 2, 12 t (q31;q24.3) [1], 9, 14 t (q13;q22) [1]	Normal	Normal	8, 10 t(q22;p11.2) [2]
05	Normal	+7 [2], +X [1]	+7 [3], 10, 17 t(q22;q25) [3]	Normal	Normal
06	Normal	+7 [42]	+7 [10], +7, +15 [1], 3, 6t(q27;p21.1) [1]	+7 [15]	+7 [9]
07	Normal	+7 [5], X, 2 t (p22.1;q31) [1]	7, 10 t(q31.3; q26.3) [9]	Normal	Normal
08	Normal	+7 [12]	+7 [20], +7 +7 [2]	-X, 11, 14t(q13;q24) [9], +7 [2], +7 +9 [1], +11 [1]	+7 [1], +7 +9 [1], +19 [1]
09	Normal	Normal	11, 11t (p15.3;q21) [2], inv (11) (p15.3;q21), 15, 20t (q22; q13.3) [1], +7 +8 [1]	7, 11t(q36;q22) [1], 11, 11t(p15.3;q21) [1]	Normal
10	Normal	Normal	Normal	Normal	Normal

Table S2.

Karyotype abnormalities by digital karyotyping.

ID	P0	P2	P5	P10	P15
01	+7 [5.2%]	NA	+7 [4.8%]	+7 [9.5%] +10 [33.5%]	+10 [11%]
02	ND	NA	NA	ND	NA
03	ND	NA	NA	+7 [14.6%]	NA
04	ND	NA	NA	ND	NA
05	ND	NA	NA	ND	NA
06	+7 [7.9%]	+7 [25.8%]	+7 [27.0%]	+7 [17.5%]	+7 [24.2%]
07	ND	+7 [3.9%]	NA	ND	NA
08	+7 [9.5%]	+7 [15.7%]	NA	+7 [13.7%]	+7 [1.5%]
09	ND	NA	NA	ND	NA
10	ND	NA	NA	ND	NA

Table S3.

Table S3-1. List of 372 genes on chromosome 7.

ABCB8	NM_007188	C7orf60	NM_152556	RINT1	NM_021930
ZNF316	NM_001278559	RBM28	NM_018077	AGK	NM_018238
ZNF117	NM_015852	TWISTNB	NM_001002926	CACNA2D1	NM_001302890
LRWD1	NM_152892	RASA4B	NM_001277335_1	TRRAP	NM_003496
HIP1	NM_005338	GTF2IRD2	NM_173537	NDUFA5	NM_001291304
ORAI2	NM_032831	KCTD7	NM_153033	RBM48	NM_032120
NRF1	NM_001293163	UBE2D4	NM_015983	DNAAF5	NM_017802
MTERF1	NM_001301134	HOXA5	NM_019102	SNX13	NM_015132
ZNF212	NM_012256	SLC12A9	NM_001267812	AASS	NM_005763
ZNF783	NM_001195220	NSUN5	NM_001168348	ADCK2	NM_052853
CASD1	NM_022900	MTRNR2L6	NM_001190487	KMT2C	NM_170606
USP42	NM_032172	PURB	NM_033224	BRAT1	NM_152743
MIOS	NM_019005	NUP205	NM_015135	GCC1	NM_024523
NOD1	NM_006092	CDCA7L	NM_001127370	ZNF777	NM_015694
GATSL2	NM_001145064	ZC3HC1	NM_001282190	CLDN12	NM_001185073
RASA4	NM_006989	AP5Z1	NM_014855	THAP5	NM_001287599
RBAK	NM_001204456	AUTS2	NM_001127231	KLHDC10	NM_014997
AVL9	NM_015060	AKAP9	NM_005751	PNPLA8	NM_001256007
ING3	NM_198267	FO XK1	NM_001037165	NUPL2	NM_007342
TECPR1	NM_015395	PPP1R35	NM_145030	NAPEPLD	NM_001122838
PAXIP1	NM_007349	EPHB4	NM_004444	TRIM56	NM_030961
ARHGEF5	NM_005435	CYCS	NM_018947	POMZP3	NM_152992
C7orf43	NM_001303470	SMURF1	NM_181349	WDR60	NM_018051
ZNF862	NM_001099220	RFC2	NM_001278793	MAFK	NM_002360
FBXL18	NM_024963	DTX2	NM_001102596	ATP5J2-PTC	NM_001039178
SNX8	NM_013321	ZNF746	NM_001163474	RBM33	NM_053043
PEX1	NM_001282678	AHCYL2	NM_001130723	TNS3	NM_022748
ZKSCAN5	NM_014569	ZNF394	NM_032164	CDK6	NM_001145306
VPS50	NM_017667	ZNF12	NM_006956	FAM220A	NM_001037163
NOM1	NM_138400	LRCH4	NM_001289934	BCAP29	NM_018844
TYW1	NM_018264	GNAI1	NM_001256414	CDK13	NM_031267
STEAP1B	NM_207342	TMEM209	NM_001301163	NT5C3A	NM_001002009
SLC35B4	NM_032826	C7orf26	NM_024067	GPER1	NM_001098201
AP4M1	NM_004722	STEAP2	NM_001040665	STYXL1	NM_016086
CROT	NM_001143935	DNAJC30	NM_032317	PRKRIP1	NM_024653
POLM	NM_001284331	HOXA7	NM_006896	CPSF4	NM_006693
GTF2IRD2B	NM_001003795	UMAD1	NM_001302349	ORC5	NM_002553
HILPDA	NM_013332	MKLN1	NM_001145354	KBTBD2	NM_015483
IQCE	NM_001287502	CCDC71L	NM_175884	PSMG3	NM_032302

Table S3-2. List of 372 genes on chromosome 7.

TMEM60	NM_032936	TBL2	NM_012453	COG5	NM_001161520
REPIN1	NM_014374	CPED1	NM_024913	POM121	NM_001257190
TBRG4	NM_001261834	INSIG1	NM_198336	ZKSCAN1	NM_001287055
POLR2J2	NM_032959	RNF216	NM_207111	GTF2IRD1	NM_005685
ZNF282	NM_001303481	NAMPT	NM_005746	TTYH3	NM_025250
NACAD	NM_001146334	TMEM243	NM_024315	POP7	NM_005837
CDK5	NM_001164410	DLD	NM_001289750	WBSCR16	NM_030798
PHF14	NM_014660	IMPDH1	NM_001142576	POR	NM_000941
C7orf25	NM_001099858	COPG2	NM_001290033	DAGLB	NM_001142936
CASP2	NM_001224	MET	NM_001127500	WASL	NM_003941
PSPH	NM_004577	STARD3NL	NM_032016	ANKIB1	NM_019004
ZNF3	NM_017715	RP9	NM_203288	VPS41	NM_080631
IFT22	NM_022777	CRCP	NM_001040648	ST7	NM_021908
KLHL7	NM_018846	LIMK1	NM_002314	SLC4A2	NM_003040
BLVRA	NM_000712	DPY19L1	NM_015283	CCDC136	NM_001201372
MAD1L1	NM_001304525	TMEM120A	NM_031925	TMUB1	NM_001136044
DNAJC2	NM_014377	ARMC10	NM_001161009	BZW2	NM_001159767
ASL	NM_000048	C7orf49	NM_001243752	KMT2E	NM_018682
TMEM140	NM_018295	INTS1	NM_001080453	GUSB	NM_001293105
STEAP1	NM_012449	CNOT4	NM_001190847	FZD1	NM_003505
CDK14	NM_012395	POM121C	NM_001099415	CHST12	NM_001243794
HOXA9	NM_152739	TRIM4	NM_033091	GBAS	NM_001202469
GIGYF1	NM_022574	ANKMY2	NM_020319	CLIP2	NM_032421
GLI3	NM_000168	SAMD9L	NM_152703	ZMIZ2	NM_174929
METTL2B	NM_018396	MRPS17	NM_015969	MEOX2	NM_005924
LMBR1	NM_022458	PRKAG2	NM_001040633	RALA	NM_005402
MCM7	NM_001278595	POLR2J3	NM_001097615	ZDHHC4	NM_001134389
GRB10	NM_001001550	AIMP2	NM_006303	NUDCD3	NM_015332
MPLKIP	NM_138701	IFRD1	NM_001550	ZC3HAV1	NM_024625
VKORC1L1	NM_001284342	TMEM106B	NM_001134232	HOXA10	NM_018951
MDFIC	NM_199072	SAMD9	NM_017654	MTURN	NM_152793
YAE1D1	NM_001282446	FTSJ2	NM_013393	SLC37A3	NM_207113
DNAJB9	NM_012328	PMPCB	NM_004279	MOSPD3	NM_001040097
HIPK2	NM_001113239	URGCP	NM_001290075	AGAP3	NM_001281300
KRIT1	NM_194456	HERPUD2	NM_022373	CNPY4	NM_152755
MICALL2	NM_182924	TWIST1	NM_000474	CUL1	NM_003592
GET4	NM_015949	SRPK2	NM_182691	NUDT1	NM_002452
DDX56	NM_019082	JAZF1	NM_175061	DFNA5	NM_001127454
PHTF2	NM_001127360	FAM126A	NM_032581	GNA12	NM_001282440

Table S3-3. List of 372 genes on chromosome 7.

SMARCD3	NM_001003802	CYTH3	NM_004227	NDUFB2	NM_004546
ZNF655	NM_138494	YKT6	NM_006555	LAMTOR4	NM_001008395
RHBDD2	NM_001040456	PON2	NM_001018161	AKR1B1	NM_001628
TNRC18	NM_001080495	EPDR1	NM_001242946	SCRN1	NM_001145514
ABCF2	NM_005692	CCZ1	NM_015622	CAPZA2	NM_006136
UBE3C	NM_014671	EIF2AK1	NM_001134335	RHEB	NM_005614
PSMA2	NM_002787	CCZ1B	NM_198097	MEST	NM_177525
VOPP1	NM_030796	FAM180A	NM_205855	DNAJB6	NM_005494
GNG11	NM_004126	OGDH	NM_001165036	SRI	NM_003130
WIPI2	NM_001033520	PLOD3	NM_001084	ESYT2	NM_020728
MEPCE	NM_001194992	FAM20C	NM_020223_2	SUMF2	NM_001042470
C7orf73	NM_001130929	LUC7L2	NM_016019	SEPTIN7	NM_001788
TCAF1	NM_001206941	CHCHD3	NM_017812	COPS6	NM_006833
ZFAND2A	NM_182491	MRPL32	NM_031903	SSBP1	NM_001256510
HBP1	NM_001244262	CBX3	NM_007276	CUX1	NM_001202546
CYP51A1	NM_000786	PSMC2	NM_002803	SEC61G	NM_001012456
STK17A	NM_004760	ZNHIT1	NM_006349	LUZP6	NM_001128619
CREB3L2	NM_194071	EXOC4	NM_001037126	TES	NM_015641
GALNT11	NM_001304514	TRA2A	NM_013293	YWHAG	NM_012479
MALSU1	NM_138446	SFRP4	NM_003014	TMEM248	NM_017994
SRRT	NM_001128853	CCT6A	NM_001762	PDIA4	NM_004911
FASTK	NM_006712	FSCN1	NM_003088	TAX1BP1	NM_001206901
CHPF2	NM_001284295	HIBADH	NM_152740	GNB2	NM_005273
BPGM	NM_001293085	UBE2H	NM_182697	TOMM7	NM_019059
C1GALT1	NM_020156	PODXL	NM_005397	FAM3C	NM_014888
POLR2J	NM_006234	SUN1	NM_001171946	SGCE	NM_001099401
BAZ1B	NM_032408	PDAP1	NM_014891	BRI3	NM_001159491
CREB5	NM_004904	C7orf50	NM_032350	CHCHD2	NM_016139
EGFR	NM_005228	TRIP6	NM_003302	ARF5	NM_001662
CAV2	NM_001206748	POLD2	NM_006230	ARPC1A	NM_001190996
TPST1	NM_003596	H2AFV	NM_138635	SND1	NM_014390
ASNS	NM_001673	AHR	NM_001621	MRPS24	NM_032014
NUB1	NM_016118	LAMB1	NM_002291	GSTK1	NM_001143679
MRPS33	NM_016071	BUD31	NM_003910	ATP6V1F	NM_004231
PTPN12	NM_001131008	PDE1C	NM_001191058	EIF4H	NM_031992
SYPL1	NM_182715	TMED4	NM_001303059	FIS1	NM_016068
RABGEF1	NM_001287060	AP1S1	NM_001283	KDEL2	NM_001100603
NDUFA4	NM_002489	EIF3B	NM_001037283	AEBP1	NM_001129
GTF2I	NM_032999	DBNL	NM_001284315	SHFM1	NM_006304

Table S3-4. List of 372 genes on chromosome 7.

HNRNPA2B1	NM_002137
GPNUMB	NM_001005340
GARS	NM_002047
RAC1	NM_018890
FLNC	NM_001458
ELN	NM_001081754
ARPC1B	NM_005720
SBDS	NM_016038
FKBP9	NM_001284343
ATP5J2	NM_001039178
PPIA	NM_001300981
ZYX	NM_001010972
CAV1	NM_001753
SERPINE1	NM_000602
CALD1	NM_033140
HSPB1	NM_001540
PCOLCE	NM_002593
SEMA3C	NM_006379
COL1A2	NM_000089
ACTB	NM_001101
IGFBP3	NM_000598