

Table SI. ZFPM2 and ZFPM2-AS1 associated genes.

Gene	Function	Entrez gene ID
ZFPM2-AS1	ZFPM2 antisense RNA 1	102723356
ZFPM2	Zinc finger protein: FOG family member 2	23414
DUXAP10	Double homeobox A pseudogene 10	503639
DUXAP8	Double homeobox A pseudogene 8	503637
LOC105369844	Uncharacterized LOC105369844	105369844
LINC02434	Long intergenic non-protein coding RNA 2434	105377606
LOC107985638	Uncharacterized LOC107985638	107985638
MAGEC2	MAGE family member C2	51438
LOC100507377	Uncharacterized LOC100507377	100507377
SRPX2	Sushi repeat containing protein: X-linked 2	27286
MAGEA3	MAGE family member A3	4102
LOC105375631	Uncharacterized LOC105375631	105375631
LOC102724542	Uncharacterized LOC102724542	102724542
MAGEA6	MAGE family member A6	4105
LINC02454	Long intergenic non-protein coding RNA 2454	105369807
LINC02241	Long intergenic non-protein coding RNA 2241	105374676
LOC107986840	Uncharacterized LOC107986840	107986840
BMS1P22	BMS1: Ribosome biogenesis factor pseudogene 22	106480334
LINC02475	Long intergenic non-protein coding RNA 2475	100506827
LINC01518	Long intergenic non-protein coding RNA 1518	101929397
TM4SF19	Transmembrane 4 L six family member 19	116211
MAGEA12	MAGE family member A12	4111
LINC02081	Long intergenic non-protein coding RNA 2081	101928710
LINC01583	Long intergenic non-protein coding RNA 1583	101929690
LINC02105	Long intergenic non-protein coding RNA 2105	105378966
LOC102723663	Uncharacterized LOC102723663	102723663
OR51B5	Olfactory receptor family 51 subfamily B member 5	282763
LOC102724434	Uncharacterized LOC102724434	102724434
LOC105370956	Uncharacterized LOC105370956	105370956
MAGEB2	MAGE family member B2	4113
LINC00346	Long intergenic non-protein coding RNA 346	283487
SSX1	SSX family member 1	6756
CSAG1	Chondrosarcoma associated gene 1	158511
LOC283028	Uncharacterized LOC283028	283028
LOC107986973	Uncharacterized LOC107986973	107986973
LINC01060	Long intergenic non-protein coding RNA 1060	401164
LOC100128317	Uncharacterized LOC100128317	100128317
LINC00460	Long intergenic non-protein coding RNA 460	728192
LOC105371070	Uncharacterized LOC105371070	105371070
LOC102723724	Uncharacterized LOC102723724	102723724
MAGEC1	MAGE family member C1	9947
LURAPIL-AS1	LURAPIL antisense RNA 1	101929467
LINC01615	Long intergenic non-protein coding RNA 1615	101929484
LOC100508631	Uncharacterized LOC100508631	100508631
LOC105374003	Uncharacterized LOC105374003	105374003
LOC105378929	Uncharacterized LOC105378929	105378929
CD163L1	CD163 molecule like 1	283316
SHOX2	Short stature homeobox 2	6474
LOC107986558	Uncharacterized LOC107986558	107986558
OR51B4	Olfactory receptor family 51 subfamily B member 4	79339
LINC02104	Long intergenic non-protein coding RNA 2104	101926940
EYA4	EYA transcriptional coactivator and phosphatase 4	2070
CT83	Cancer/testis antigen 83	203413
LOC105371990	Uncharacterized LOC105371990	105371990
LOC400655	Uncharacterized LOC400655	400655
LOC730338	Uncharacterized LOC730338	730338

Table SI. Continued.

Gene	Function	Entrez gene ID
ADGRD1-AS1	ADGRD1 antisense RNA 1	105755954
KCNMB2-AS1	KCNMB2 antisense RNA 1	104797538
LOC107985134	Uncharacterized LOC107985134	107985134
LOC107985054	Uncharacterized LOC107985054	107985054
LINC01419	Long intergenic non-protein coding RNA 1419	103352670
ULBP2	UL16 binding protein 2	80328
GNGT1	G protein subunit gamma transducin 1	2792
LOC107986334	Uncharacterized LOC107986334	107986334
LOC107987110	Uncharacterized LOC107987110	107987110
LOC105374715	Uncharacterized LOC105374715	105374715
LOC105373349	Uncharacterized LOC105373349	105373349
LOC101927040	Uncharacterized LOC101927040	101927040
MAGEA1	MAGE family member A1	4100
TMEM132D-AS1	TMEM132D antisense RNA 1	283352
LOC105369827	Uncharacterized LOC105369827	105369827
LOC101927417	Uncharacterized LOC101927417	101927417
AHCTF1P1	AT-hook containing transcription factor 1 pseudogene 1	285116
ME1	Malic enzyme 1	4199
LINC0002	Uncharacterized LincR-0002	103344926
LOC100506474	Uncharacterized LOC100506474	100506474
LOC105376236	Uncharacterized LOC105376236	105376236
LOC100507065	Uncharacterized LOC100507065	100507065
RPLP0P2	Ribosomal protein lateral stalk subunit P0 pseudogene 2	113157
LINC00355	Long intergenic non-protein coding RNA 355	144766
POPDC3	Popeye domain containing 3	64208
LOC151760	Putative uncharacterized protein LOC151760	151760
LOC107986198	Uncharacterized LOC107986198	107986198
MMP13	Matrix metalloproteinase 13	4322
LOC644135	Uncharacterized LOC644135	644135
COX7B2	Cytochrome c oxidase subunit 7B2	170712
LOC105371967	Uncharacterized LOC105371967	105371967
TLR6	Toll like receptor 6	10333
OSMR	Oncostatin M receptor	9180
NMRAL2P	NmrA like redox sensor 2: pseudogene	344887
LINC01711	Long intergenic non-protein coding RNA 1711	79160
LOC105371453	Uncharacterized LOC105371453	105371453
LINC02407	Long intergenic non-protein coding RNA 2407	105369848
LOC107984684	Uncharacterized LOC107984684	107984684
NFE4	Nuclear factor: erythroid 4	58160
LOC107984132	Uncharacterized LOC107984132	107984132
PPDPFL	Pancreatic progenitor cell differentiation and proliferation factor like	492307
COL12A1	Collagen type XII alpha 1 chain	1303
LOC105379417	Ankyrin repeat domain-containing protein 20A2-like	105379417
LOC105379562	Uncharacterized LOC105379562	105379562
LOC107986606	Uncharacterized LOC107986606	107986606
FAP	Fibroblast activation protein alpha	2191
LVRN	Laeverin	206338
LOC105375816	Putative coiled-coil domain-containing protein 144C	105375816
LOC101929532	Uncharacterized LOC101929532	101929532
ACTBL2	Actin: beta like 2	345651
LOC107985004	Uncharacterized LOC107985004	107985004
LOC100421746	PAGE family member 5 pseudogene	100421746
LOC102723847	Uncharacterized LOC102723847	102723847
HRH1	Histamine receptor H1	3269
NR2F1-AS1	NR2F1 antisense RNA 1	441094
FAT1	FAT atypical cadherin 1	2195

Table SI. Continued.

Gene	Function	Entrez gene ID
LINC02212	Long intergenic non-protein coding RNA 2212	101929412
LOC101927888	Uncharacterized LOC101927888	101927888
LOC102723834	Uncharacterized LOC102723834	102723834
MKRN3	Makorin ring finger protein 3	7681
LOC650226	Ankyrin repeat domain 26 pseudogene	650226
LOC101927263	Uncharacterized LOC101927263	101927263
LOC101929028	Uncharacterized LOC101929028	101929028
TPTE	Transmembrane phosphatase with tensin homology	7179
TEX41	Testis expressed 41 (non-protein coding)	401014
NAA11	N(alpha)-acetyltransferase 11: NatA catalytic subunit	84779
ASNSP1	Asparagine synthetase pseudogene 1	389652
LINC02331	Long intergenic non-protein coding RNA 2331	105370503
LINC01111	Long intergenic non-protein coding RNA 1111	101926978
LINC01029	Long intergenic non-protein coding RNA 1029	101927715
GCNT3	Glucosaminyl (N-acetyl) transferase 3: mucin type	9245
LOC101928446	Uncharacterized LOC101928446	101928446
DLGAP1-AS2	DLGAP1 antisense RNA 2	84777
IL13RA2	Interleukin 13 receptor subunit alpha 2	3598
SPRY4-AS1	SPRY4 antisense RNA 1	101926941
SELENOOLP	Selenoprotein O like: pseudogene	105376462
LOC105371703	Uncharacterized LOC105371703	105371703
LOC102724983	Uncharacterized LOC102724983	102724983
SLC44A5	Solute carrier family 44 member 5	204962
LINC02274	Long intergenic non-protein coding RNA 2274	100506498
LINC01287	Long intergenic non-protein coding RNA 1287	103724390
FRG1JP	FSHD region gene 1 family member J: pseudogene	642236
MARCOL	MARCO like	105378220
SPANXB1	SPANX family member B1	728695
CNTN5	Contactin 5	53942
LOC105376939	Uncharacterized LOC105376939	105376939
SLCO1B3	Solute carrier organic anion transporter family member 1B3	28234
BBOX1-AS1	BBOX1 antisense RNA 1	103695435
LINC00887	Long intergenic non-protein coding RNA 887	100131551
LINC01094	Long intergenic non-protein coding RNA 1094	100505702
CCNYL2	Cyclin Y-like 2 (pseudogene)	414194
LOC107986951	Uncharacterized LOC107986951	107986951
LOC105378482	Uncharacterized LOC105378482	105378482
CASC9	Cancer susceptibility 9 (non-protein coding)	101805492
LOC105370353	Uncharacterized LOC105370353	105370353
FZD6	Frizzled class receptor 6	8323
OXR1	Oxidation resistance 1	55074
LOC102723546	Uncharacterized LOC102723546	102723546
MAGEA10	MAGE family member A10	4109
DPY19L1P2	DPY19L1 pseudogene 2	102724668
LINC01297	Long intergenic non-protein coding RNA 1297	106146148
LINC01446	Long intergenic non-protein coding RNA 1446	401337
HOXD8	Homeobox D8	3234
LOC105378088	Uncharacterized LOC105378088	105378088
LOC105370064	Uncharacterized LOC105370064	105370064
CD109	CD109 molecule	135228
LINC00491	Long intergenic non-protein coding RNA 491	285708
LOC107987366	Uncharacterized LOC107987366	107987366
LOC105373137	Uncharacterized LOC105373137	105373137
APCDD1L-AS1	APCDD1L antisense RNA 1 (head to head)	149773
LOC284930	Uncharacterized LOC284930	284930
CARD6	Caspase recruitment domain family member 6	84674

Table SI. Continued.

Gene	Function	Entrez gene ID
FBXL13	F-box and leucine rich repeat protein 13	222235
GULP1	GULP: Engulfment adaptor PTB domain containing 1	51454
SMPX	Small muscle protein: X-linked	23676
LNC SRLR	lncRNA sorafenib resistance in renal cell carcinoma associated	109729161
LOC105373369	Uncharacterized LOC105373369	105373369
FKBP9P1	FK506 binding protein 9 pseudogene 1	360132
LOC105377845	Uncharacterized LOC105377845	105377845
PTH LH	Parathyroid hormone like hormone	5744
ZNRF3-AS1	ZNRF3 antisense RNA 1	100874123
LINC01929	Long intergenic non-protein coding RNA 1929	101927229
LINC01411	Long intergenic non-protein coding RNA 1411	101928176
ZMIZ1-AS1	ZMIZ1 antisense RNA 1	283050
BLID	BH3-like motif containing: cell death inducer	414899
LOC101927136	Uncharacterized LOC101927136	101927136
LOC107985229	Uncharacterized LOC107985229	107985229
LOC101929128	Uncharacterized LOC101929128	101929128
CNGB3	Cyclic nucleotide gated channel beta 3	54714
SPP1	Secreted phosphoprotein 1	6696
AACSP1	Acetoacetyl-CoA synthetase pseudogene 1	729522
THBS2	Thrombospondin 2	7058
LOC105377508	Uncharacterized LOC105377508	105377508
PPFIA2	PTPRF interacting protein alpha 2	8499
LOC101927356	Uncharacterized LOC101927356	101927356
LOC105376369	Uncharacterized LOC105376369	105376369
HTATSF1P2	HIV-1 Tat specific factor 1 pseudogene 2	401233
PHTF1	Putative homeodomain transcription factor 1	10745
LOC102723591	Uncharacterized LOC102723591	102723591
ARL14EPL	ADP ribosylation factor like GTPase 14 effector protein like	644100
IL31RA	Interleukin 31 receptor A	133396
PDE10A	Phosphodiesterase 10A	10846
TBX15	T-box 15	6913
LOC107984551	Uncharacterized LOC107984551	107984551
CFI	Complement factor I	3426

ZFPM2-AS1, zinc finger protein, FOG family member 2; AS1, antisense RNA 1.