

Supplementary Table S1. List of genes whose expression was significantly down-regulated in OS patients who developed pulmonary metastasis ($P < 0.05$)

Probe Set ID	Gene symbol	Description	P-value	Fold change
207076_s_at	ASS1	argininosuccinate synthetase 1	2.20E-05	6.305
218424_s_at	STEAP3	STEAP family member 3	0.00126	2.150
237452_at	---	Transcribed locus	0.00130	2.384
237773_at	---	Transcribed locus	0.00224	2.175
225863_s_at	C19orf12	chromosome 19 open reading frame 12	0.00272	2.025
201036_s_at	HADH	hydroxyacyl-Coenzyme A dehydrogenase	0.00299	2.003
219454_at	EGFL6	EGF-like-domain, multiple 6	0.00304	9.457
228844_at	SLC13A5	solute carrier family 13 (sodium-dependent citrate transporter), member 5	0.00321	2.117
229963_at	BEX5	BEX family member 5	0.00334	4.086
204223_at	PRELP	proline/arginine-rich end leucine-rich repeat protein	0.00342	4.340
205908_s_at	OMD	osteomodulin	0.00443	4.035
225293_at	COL27A1	collagen, type XXVII, alpha 1	0.00459	2.583
227655_at	---	CDNA FLJ38512 fis, clone HCHON2000503	0.00462	2.187
205907_s_at	OMD	osteomodulin	0.00473	3.602
225288_at	COL27A1	collagen, type XXVII, alpha 1	0.00548	2.842
223836_at	FGFBP2	fibroblast growth factor binding protein 2	0.00574	13.529
224020_at	MGC4473	hypothetical LOC79100	0.00580	3.149
223983_s_at	C19orf12	chromosome 19 open reading frame 12	0.00617	2.152
205679_x_at	ACAN	aggrecan	0.00641	5.251
210258_at	RGS13	regulator of G-protein signaling 13	0.00755	2.317
226760_at	LOC203411	hypothetical protein LOC203411	0.00975	2.120
207692_s_at	ACAN	aggrecan	0.01006	6.008
204400_at	EFS	embryonal Fyn-associated substrate	0.01043	2.041
202709_at	FMOD	fibromodulin	0.01068	6.475
228224_at	PRELP	proline/arginine-rich end leucine-rich repeat protein	0.01139	3.433
210367_s_at	PTGES	prostaglandin E synthase	0.01216	2.525
213492_at	COL2A1	collagen, type II, alpha 1	0.01341	21.271
210839_s_at	ENPP2	ectonucleotide pyrophosphatase/phosphodiesterase 2 (autotaxin)	0.01351	2.547
202575_at	CRABP2	cellular retinoic acid binding protein 2	0.01390	2.716
217161_x_at	ACAN	aggrecan	0.01398	4.895
202920_at	ANK2	ankyrin 2, neuronal	0.01425	2.990
209628_at	NXT2	nuclear transport factor 2-like export factor 2	0.01456	2.168
202219_at	SLC6A8	solute carrier family 6 (neurotransmitter transporter, creatine), member 8	0.01469	2.042
224345_x_at	C3orf28	chromosome 3 open reading frame 28	0.01484	2.349
206172_at	IL13RA2	interleukin 13 receptor, alpha 2	0.01508	5.689
209392_at	ENPP2	ectonucleotide pyrophosphatase/phosphodiesterase 2 (autotaxin)	0.01512	2.206
231131_at	FAM133A	family with sequence similarity 133, member A	0.01598	2.812
223193_x_at	C3orf28	chromosome 3 open reading frame 28	0.01612	2.331
221584_s_at	KCNMA1	potassium large conductance calcium-activated channel, subfamily M, alpha member 1	0.01629	2.209
217525_at	OLFML1	olfactomedin-like 1	0.01633	2.190
232267_at	GPR133	G protein-coupled receptor 133	0.01676	2.025
228218_at	---	CDNA clone IMAGE:5284125	0.01836	2.057
203570_at	LOXL1	lysyl oxidase-like 1	0.01860	2.524
204508_s_at	CA12	carbonic anhydrase XII	0.01922	2.591
211276_at	TCEAL2	transcription elongation factor A (SII)-like 2	0.01938	4.972
204736_s_at	CSPG4	chondroitin sulfate proteoglycan 4	0.01993	2.178
213348_at	CDKN1C	cyclin-dependent kinase inhibitor 1C (p57, Kip2)	0.02170	2.185
205475_at	SCRG1	scrapie responsive protein 1	0.02189	20.654
220942_x_at	C3orf28	chromosome 3 open reading frame 28	0.02291	2.178
39729_at	PRDX2	peroxiredoxin 2	0.02310	2.222
214164_x_at	CA12	carbonic anhydrase XII	0.02463	2.810
230204_at	---	Transcribed locus	0.02469	5.283
232010_at	FSTL5	follistatin-like 5	0.02477	3.505
210511_s_at	INHBA	inhibin, beta A	0.02595	2.179
239481_at	FAM133A	family with sequence similarity 133, member A	0.02598	3.027
201261_x_at	BGN	biglycan	0.02718	2.386
202868_s_at	POP4	processing of precursor 4, ribonuclease P/MRP subunit (S. cerevisiae)	0.02766	2.204
227240_at	NGEF	neuronal guanine nucleotide exchange factor	0.02795	2.773
210512_s_at	VEGFA	vascular endothelial growth factor A	0.02845	2.188
230372_at	HAS2	Hyaluronan synthase 2	0.03010	2.571
230895_at	---	Transcribed locus	0.03018	4.559

206432_at	HAS2	hyaluronan synthase 2	0.03090	2.436
223687_s_at	LY6K	lymphocyte antigen 6 complex, locus K	0.03109	2.927
204932_at	TNFRSF11B	tumor necrosis factor receptor superfamily, member 11b (osteoprotegerin)	0.03150	2.819
202935_s_at	SOX9	SRY (sex determining region Y)-box 9 (campomelic dysplasia, autosomal sex-reversal)	0.03178	2.396
228214_at	---	Transcribed locus	0.03307	2.034
213905_x_at	BGN	biglycan	0.03345	2.434
218730_s_at	OGN	osteoglycin	0.03417	5.400
217404_s_at	COL2A1	collagen, type II, alpha 1	0.03422	19.284
205081_at	CRIP1	cysteine-rich protein 1 (intestinal)	0.03467	2.078
212171_x_at	VEGFA	vascular endothelial growth factor A	0.03535	2.031
210145_at	PLA2G4A	phospholipase A2, group IVA (cytosolic, calcium-dependent)	0.03538	2.277
214297_at	CSPG4	chondroitin sulfate proteoglycan 4	0.03705	2.212
222043_at	CLU	clusterin	0.03836	2.974
205523_at	HAPLN1	hyaluronan and proteoglycan link protein 1	0.03897	3.910
207177_at	PTGFR	prostaglandin F receptor (FP)	0.04037	2.926
209189_at	FOS	v-fos FBJ murine osteosarcoma viral oncogene homolog	0.04090	2.109
202410_x_at	IGF2 /// INS /// INS-IGF2	insulin-like growth factor 2 (somatomedin A) /// insulin /// INS-IGF2	0.04110	2.086
204724_s_at	COL9A3	collagen, type IX, alpha 3	0.04126	4.816
222722_at	OGN	osteoglycin	0.04157	4.682
203963_at	CA12	carbonic anhydrase XII	0.04177	2.506
227140_at	---	CDNA FLJ11041 fis, clone PLACE1004405	0.04272	2.160
215867_x_at	CA12	carbonic anhydrase XII	0.04364	2.506
209815_at	PTCH1	patched homolog 1 (Drosophila)	0.04393	2.823
229839_at	SCARA5	Scavenger receptor class A, member 5 (putative)	0.04394	2.219
204844_at	ENPEP	glutamyl aminopeptidase (aminopeptidase A)	0.04647	2.050
208651_x_at	CD24	CD24 molecule	0.04673	2.325
266_s_at	CD24	CD24 molecule	0.04677	2.731
218484_at	NDUFA4L2	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 4-like 2	0.04732	3.466
227498_at	---	CDNA FLJ11723 fis, clone HEMBA1005314	0.04748	2.363
216379_x_at	CD24	CD24 molecule	0.04815	2.642
204933_s_at	TNFRSF11B	tumor necrosis factor receptor superfamily, member 11b (osteoprotegerin)	0.04816	2.390
205901_at	PNOC	prepronociceptin	0.04851	4.542
209771_x_at	CD24	CD24 molecule	0.04851	2.509
205524_s_at	HAPLN1	hyaluronan and proteoglycan link protein 1	0.04911	3.479

Supplementary Table S2. List of genes whose expression was significantly up-regulated in OS patients who developed pulmonary metastasis ($P < 0.05$)

Probe Set ID	Gene symbol	Description	P-value	Fold change
204160_s_at	ENPP4	ectonucleotide pyrophosphatase/phosphodiesterase 4 (putative function)	0.00894	2.124
227290_at	---	CDNA FLJ13598 fis, clone PLACE1009921	0.01817	2.012
204913_s_at	SOX11	SRY (sex determining region Y)-box 11	0.04052	3.869
206391_at	RARRES1	retinoic acid receptor responder (tazarotene induced) 1	0.04493	2.291
230624_at	SLC25A27	solute carrier family 25, member 27	0.04715	2.111
235183_at	---	CDNA clone IMAGE:5312689	0.04942	3.532