

Additional File 5: Genes analyzed by quantitative real-time PCR

No.	RZPD ID	Gene Symbol	p-value (Wilcox)	Fold Change	mean Ct value GS 6	mean Ct value GS 8-10	forward primer	reverse primer
1	RZPDp201C1129D	ROCK1	0.00	9.76	13.34	10.06	ccctcgaaagcctttctaca	gggcactcagtcacatgggt
2	IMAGp998G1518	ANXA5	0.00	4.28	8.97	6.88	gctcaagttgaacaagatgctc	tctcatctgtccccattt
3	IMAGp998D08136	VDAC1	0.00	5.41	11.89	9.45	ttctcacctaacactcgggaaaaa	ccagcaatgtcgaaatccat
4	IMAGp998O16794	NGFRAP1	0.01	3.95	10.20	8.22	tcggtgactcgtcctc	gacactagcctcgagacc
5	RZPDp1096F101D	TEGT	0.01	2.77	5.30	3.83	tgctggatttgattcctta	ctggggtgacagcaataca
6	RZPDp202B129D	NPM1	0.03	3.07	6.61	4.99	cgcccttctctctacctaagtg	tcgpccttttagttcacaacc
7	RZPDp1096G0216D	PDIA3	0.03	2.40	6.82	5.56	ctgtcaaggagagagaagttgtca	tctccagagccttccatc
8	RZPDp201F0834D	HMG81	0.03	4.68	15.28	13.06	gagtgaggaggctcgctct	tgccatgttttagtttttccc
9	IMAGp998D184645	TMEM16G	0.04	0.35	16.83	18.33	gctctgtgtgtatcggtgt	ggcacggtacaggatgataga
10	IMAGp998I22653	TMEM69	0.05	2.77	14.70	13.23	ttcaatagggccagatgac	gaaagtatatctgtctgtgctt
11	IMAGp998N13665	PLA2G2A	0.05	3.00	5.95	4.36	aaatttctgagctacaaagtttagcaac	acactcacacagtgactctgc
12	IMAGp998D09597	COL1A2	0.05	2.02	14.55	13.54	cttgaggaggctggtactgc	gagcaccagaagaccctga
13	IMAGp998L12154	ECHS1	0.06	1.89	16.30	15.39	tcaaccaggccctgaagat	caggttctgcatcttcttgata
14	RZPDp1096A0718D	NUB1	0.06	1.62	11.42	10.73	aaaggagtggtgctactccac	ccacatctgaggatgtctga
15	IMAGp998M03537	APLP2	0.06	2.83	13.31	11.81	tggtgtgtgttaaagcgatg	tcgaaatacacatcacatcatg
16	RZPDp1096A0717D	6-Mar	0.07	0.64	10.22	10.88	ggagggaagatgacgctggt	gcattccaattcatgtcatcc
17	IMAGp998O22144	MAP3K5	0.07	2.98	10.36	8.78	ttaaaatctcatggagcaggtc	atttgaacgaagagagagca
18	RZPDp1096C062D	VCAN	0.07	2.92	22.79	21.24	gcacctgtgtgccaggata	cagggattagatgacattcatca
19	IMAGp998D20286	HADHB	0.08	0.66	6.00	6.59	ggcttagtggctgctggt	ataagcttccactcatatgcatgg
20	IMAGp998D20518	SAT1	0.08	0.64	6.44	7.07	gactgttcaagatcgacaagga	tgctcatcacagcagcacctc
21	IMAGp998O10119	VCP	0.08	2.75	13.17	11.71	gtgtacgctcaggggatgtc	tggtacgtttgcccgtacttc
22	IMAGp998K13587	CRIM1	0.09	3.23	18.15	16.46	ccatcaacgtggaaggaag	ttggtgtgtctgggacatac
23	RZPDp201H0728D	TRAF4	0.09	2.59	15.39	14.02	ggaccagcttctcttgact	ggataggcaggcccaatact
24	IMAGp998C021833	HNRPUL1	0.11	2.85	19.74	18.23	agctacagccctccacagc	tgtagccctgctcttaacct
25	IMAGp998B06472	FVT1	0.13	1.70	11.44	10.67	gggatggctcagtaactct	aagcaatagtcgggaaaagg
26	IMAGp998L081748	IFITM3	0.13	1.87	12.34	11.43	agatgtctcaaggaggagac	gatgtggatcagcgtgtgac
27	IMAGp998M15530	SRPK1	0.16	0.62	17.47	18.16	cctcattcagggggaagatgaca	ctgccacaatgagcctgc
28	IMAGp998C20738	SERPINE1	0.17	0.72	2.49	2.96	gaggagcaggtggacgctg	ggagcagaagcactgtactgt
29	IMAGp998O05787	F8A1	0.18	0.70	4.22	4.72	aagccacgacatgaaaatga	aggctcggtagtgtggaag
30	RZPDp202B088D	MFAP1	0.21	2.68	13.56	12.14	caaccgcacctcagctcac	ttttccattgaattctaccct
31	IMAGp998E05168	RTN4	0.23	3.20	13.71	12.03	gagcctgtgatacgcctctc	ttgaccagccgaatagtggt
32	IMAGp998F061005	CASP3	0.24	2.26	21.46	20.28	ctgttttctgtgggtgt	cagttgttccatggatacctttat
33	RZPDp1096G107D	REEP5	0.27	0.85	10.08	10.31	acaggagcttcacgctctt	gagggtccataaccgaacac
34	IMAGp998J125970	PRSS23	0.28	1.71	10.05	9.28	caatgacatcgcatggat	ctctgtggggtcttttgag
35	IMAGp998F16171	ATRN	0.37	0.60	15.40	16.14	tggtacgtgtgactgtctcg	ctttgtttgattctcaaacac
36	RZPDp201E123D	DAD1	0.37	1.46	6.63	6.09	tggtatttctcagattgacact	agttgtgtcacacacatgaaact
37	IMAGp998A16170	PABPC1	0.38	0.74	14.15	14.57	cttgggtacgcgtatgtg	aattcatgtgttccaaagcac
38	RZPDp202D108D	IK	0.39	1.24	5.67	5.36	cgctgaagaagccagaagac	tatccacagccatgtcatcc
39	RZPDp201E0230D	LRIG1	0.46	0.66	15.86	16.45	atttcgggcacaaatagagga	cacagactgtatctgtttccaa
40	RZPDp202E047D	STAT1	0.53	2.00	20.28	19.28	ctgtcctttgtgtgaatcc	gctgaagttgtaccactgaga
41	IMAGp998P10268	SCYE1	0.54	1.04	15.79	15.73	gtggctggacatcatgctt	ccaagagacggcagaanaac
42	IMAGp998D03170	TMEM123	0.54	1.17	13.16	12.93	cacaatgcacgttaacccaca	cagatgcactagtgtgtgttggt
43	IMAGp998G09159	ADAMTS1	0.54	0.73	16.27	16.72	gcgtccgtcatagaagatg	gcatacatgtgtggcatgttta
44	RZPDp202H054D	BIRC7	0.57	0.67	14.97	15.55	gcgcacctctctctcta	ggcccaacacatgcca
45	IMAGp998M221819	INDO	0.63	1.27	17.53	17.18	gttttcaccaaatccacga	ctgatactgggggtgac
46	IMAGp998K04139	SPARC	0.64	1.17	12.37	12.14	tgctgtgggtgttagcaag	ctccctgactctccact
47	IMAGp998E12372	HDGF	0.66	1.81	10.82	9.96	aggggactgtctggaaga	ataggaaaggggctctcaac
48	IMAGp998O19735	ADIPOR2	0.73	1.46	16.19	15.64	gggcattgcagccattat	aggcccaaaaacactcttg
49	RZPDp202A056D	PLAT	0.83	0.87	14.67	14.87	cggtgtgaattgtcgtgt	cttggctcgctcaact
50	IMAGp998D22407	AZGP1	0.87	0.80	10.80	11.13	cccaggagaaccaagatgg	cggggagctcttcaacat
51	IMAGp998K011928	MAP3K2	0.87	1.86	18.75	17.85	ggctcaggaagttgtccatc	aggcattctgtatttggat
52	IMAGp998F041817	HIP1	0.92	1.03	13.61	13.57	aagtagctggaggttcgttg	cttcagcttcttctgagcttc
53	IMAGp998B16371	SMS	0.94	1.21	16.03	15.75	tgaacaaagtagagggaagaatgaaa	gtgggcagtatctgtcgtat
54	IMAGp998F151749	USP39	0.98	1.14	18.30	18.11	aactccacacccctcaagtt	aagtggtcttcaacacatcg
55	IMAGp998D06697	BCL2L2	1.00	0.95	13.04	13.11	tggtgtgtggcctactgt	cgctcccgatagagctgtg
56	IMAGp998C15391	DDX5	1.00	1.15	15.22	15.02	gcctagtggtgattatcg	gggttccaaacttcttccaga
57	RZPDp202F076D	LOXL2	NA	NA	NA	NA	actgcagctctctctacg	tcgtgccagctacagtgag
58	IMAGp998N23220	MAP3K1	NA	NA	NA	NA	caccaccactgcattgcaa	acaaaggggacatattaaaggttct
59	IMAGp998M184415	NAIP	NA	NA	NA	NA	gattccaagtgctattcatg	aaatgctgtgtgtctttag
60	IMAGp998C08143	NGFR	NA	NA	NA	NA	tcactcctgtctatgtcca	tgctgtctgcagctgttc
61	IMAGp998K18671	NME1	NA	NA	NA	NA	caggccggagttcaaacctaa	caggctgactagctctgtgata
62	IMAGp998J01156	NR2E1	NA	NA	NA	NA	ggacctatgtctgaactctgg	ttctgttggtcttctgcac
63	IMAGp998C18473	REV3L	NA	NA	NA	NA	cctgtgaaaaacgctctg	atgtcacaggagcgaacac
64	IMAGp998I20178	SPP1	NA	NA	NA	NA	gagggcttgggtgtcagc	caattctcatgttagtgatttcc
65	IMAGp998H06241	SRM	NA	NA	NA	NA	tgctgtcagcaagaacc	gggtcacgtcgaggtgtga
66	IMAGp998L20376	WNK1	NA	NA	NA	NA	caagtatcagctggaacacagc	tgagtttgccttggatgt
67	IMAGp998M13132	YWHAZ	NA	NA	NA	NA	cgttacttgctgaagttgc	tgctgttggactatgtgac
68	IMAGp998C12887	TRH	NA	NA	NA	NA	gggcttgatgacttct	gagagccagtcagattgaaagat
		B2M	housekeeping gene				ttctggctggaggctatc	tcagaaattgactttccatc

NA: Ct values above detection level