

disease state	age	stage	grade
Prostate hyperplasia	73		
Urolithiasis	76		
normal	40		
Prostate hyperplasia	61		
Prostate hyperplasia	78		
Neurogenic bladder	72		
Prostate hyperplasia	68		
Urolithiasis	63		
normal	40		
Neurogenic bladder	76		
Prostate hyperplasia	69		
normal	24		
Prostate hyperplasia	65		
normal	24		
normal	37		
Urolithiasis	48		
normal	28		
Urolithiasis	23		
Neurogenic bladder	69		
normal	28		
normal	25		
Neurogenic bladder	78		
Normal	50		
normal	36		
normal	34		
Urolithiasis	85		
Neurogenic bladder	54		
Normal	53		
Prostate hyperplasia	55		
Prostate hyperplasia	76		
Infection	19		
Normal	64		
Normal	62		
Infection	62		
Neurogenic bladder	83		
normal lab	35		
Urolithiasis	76		
normal lab	40		
Urolithiasis	80		
Prostate hyperplasia	72		
Normal	70		
Urolithiasis	63		
TCC	82	-	-
TCC	69	2	3
TCC	52	a	1-2
Ureteral ca	77	3a	2~3
TCC	67	a	3
TCC	57	a	3
TCC	64	1	1
TCC	87	a	2
TCC	77	a	3
TCC	37	a	2
TCC	73	0	0
TCC	72	2	3

Fig. 1

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disease state	age	stage	grade
TCC	76	a	2
TCC	74	a	3
TCC	38	a	2
TCC	86	a	2
TCC	77	a	3
TCC	78	1	3
TCC	72	-	-
TCC	72	1	2
TCC	71	a	2
TCC	64	1	1
TCC	81	a	1
TCC	67	a	2
TCC	75	a	2
TCC	76	a	2
TCC	70	a	3
TCC	78	is	3
TCC	76	2a	3
TCC	76	?ureteral	2=3
TCC	68	2	3
TCC	78	0	0
TCC	78	1	3
TCC	70	a	2>3
TCC	77	1	3>2
TCC	83	a	2
TCC	83	a	1

Fig. 1 (continued)

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Name	Symbol	Forward Primer	Seq ID #	Reverse Primer	Seq ID #	Probe	Seq ID #
insulin-like growth factor binding protein 5	IGFBP5	AATTGTGACCGCAAAGGAT TCT	1	CAGCAGATGCCACGCTTG	2	AAGAGAAAGCAGTGCAAA CCTTCCCGT	3
homeo box A13	HOXA13	Taqman(R) Gene Expression Assay Hs00426284_m1					
midkine (neurite growth-promoting factor 2)	MDK	Taqman(R) Gene Expression Assay Hs00171064_m1					
Leukotriene B4 12-dehydrogenase	LTB4DH	TATAACAGAACCGGCCCA CTTC	4	CCCATTTTCAGCAAGTCCTT CA	5	CCAGGCCCAACCCCCAGAG ATTG	6
cell division cycle 2, G1 to S and G2 to M			7	TGT CTA CCC TTA TAC ACA ACT CCA TAG G	8	AGC CGG GAT CTA CCA TAC CCA TTG ACT AAC T	9
Topoisomerase (DNA) II alpha	TOP2A	CCG CCC AGA CAC CTA CAT TG	10	TGT ACA AAC CAG GAA CAA AAG TGA CT	11	TTC TGT GGA ATT AGT GAC CCA GCA AAT GTG	12
BCL2-associated athanogene	BAG1	Taqman(R) Gene Expression Assay Hs00185390_m1					
hypothetical protein FLJ21511	FLJ21511	Taqman(R) Gene Expression Assay Hs00228221_m1					

Fig. 2

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
ras homolog gene family, member B (RHOB), mRNA	NP_004031.1	NM_004040.2	mwghuman3 OK#A:08114	-2.684592	2.13794E- 10	2.25758E- 09	-10.53678	38	8789.5	4176	23
hypothetical protein FLJ21511 (FLJ21511), mRNA	NP_079363.1	NM_025087.1	mwghuman3 OK#A:00410	-2.080908	2.54894E- 11	3.22908E- 08	-6.925773	68	14455	9272.5	0
paired box gene 8 (PAX8), transcript variant PAX8A, mRNA	NP_003457.1	NM_003466.3	mwghuman3 OK#B:3648	-1.961896	4.71674E- 11	4.07014E- 08	-6.806281	82	19419	12999.5	0
UPF3 regulator of nonsense transcripts homolog A (yeast) (UPF3A), transcript variant 1, mRNA	NP_075387.1	NM_023011.2	mwghuman3 OK#A:06295	-3.84007	1.03703E- 13	3.34027E- 08	-7.811653	96.5	5663.5	1825	0
leukotriene B4 12- hydroxydehydr ogenase (LTB4DH), mRNA	NP_036344.1	NM_012212.2	mwghuman3 OK#B:9686	-5.034613	3.08873E- 10	1.41836E- 07	-6.436167	122.5	11340.5	3138	0

Fig. 3

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Gene name/ symbol	protein accession	mRNA ref seq accession.	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
RAB11 family interacting protein 2 (class I) (RAB11FIP2), mRNA	NP_055719.1	NM_014904.1	mwghuman3 OK#A:10479	-1.993629	4.57925E- 09	5.83951E- 08	-7.711624	156	19636.5	12951	0
TSC22 domain family, member 1 (TSC22D1), transcript variant 2, mRNA	NP_006013.1	NM_006022.2	mwghuman3 OK#A:00577	-2.133065	1.12033E- 07	1.8543E- 07	-7.698568	156.5	8415	6130	1
sulfite oxidase (SUOX), nuclear gene encoding mitochondrial protein, transcript variant 1, mRNA	NP_000447.2	NM_000456.2	mwghuman3 OK#A:05512	-1.622803	4.52404E- 10	5.29156E- 09	-6.728892	223	11312.5	8789.5	0
tetralricopeptid e repeat domain 21A (TTC21A), mRNA	NP_665698.1	NM_145755.1	mwghuman3 OK#B:6976	-2.976809	2.11314E- 07	4.28806E- 07	-6.286432	225	8375.5	3870.5	1

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
RAS p21 protein activator (GTPase activating protein) 1 (RASA1), transcript variant 2, mRNA	NP_072179.1	NM_022650.1	mwghuman3 OK#A:08292	-1.947454	3.74564E- 09	2.68048E- 06	-5.99299	235	6895.5	5277.5	7
ensembl genscan prediction		AC024384.3.1 07975.119435 .1	mwghuman3 OK#C:6641	-2.471322	4.47058E- 08	1.54585E- 06	-6.085076	255.5	3327.5	1537	
ensembl genscan prediction		AL031669.28. 1.94224.1	mwghuman3 OK#C:0930	-1.774123	6.77812E- 09	1.13272E- 06	-5.56116	288.5	4367	3218	
geminin, DNA replication inhibitor (GMNN), mRNA	NP_056979.1	NM_015895.3	mwghuman3 OK#A:03435	-2.046753	1.94846E- 07	4.07898E- 06	-5.99032	311	11844	8413.75	2
fatty acid binding protein 1, liver (FABP1), mRNA	NP_001434.1	NM_001443.1	mwghuman3 OK#A:09506	-1.985247	2.20148E- 06	6.83453E- 07	-6.750782	312.5	25595	19500.75	0
v-jun sarcoma virus 17 oncogene homolog (avian) (JUN), mRNA	NP_002219.1	NM_002228.3	mwghuman3 OK#A:04848	-3.222311	6.2171E- 07	4.59274E- 06	-6.353849	318.5	12139	5321.5	11

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
transmembran e and coiled- coil domains 4 (TMCO4), mRNA	NP_859070.2	NM_181719.2	mwghuman3 OK#B:3094	-1.799143	8.41415E- 09	3.21175E- -06	-5.702577	322.5	4584.5	3158	5
ensembl genscan prediction		AP002080.2.3 7398.74587.1	mwghuman3 OK#C:4035	-1.860121	5.75299E- 08	1.01121E- -07	-7.300326	332.5	4972.5	2643	
synaptotagmin- like 2 (SYTL2), transcript variant b, mRNA	NP_115755.2	NM_032379.3	mwghuman3 OK#B:9411	-2.343357	4.07526E- 10	9.87494E- -09	-7.993821	342	19920	12053.5	0
cyclin G1 (CCNG1), transcript variant 1, mRNA	NP_004051.1	NM_004060.3	mwghuman3 OK#B:5261	-1.83737	2.79204E- 08	4.64998E- -07	-6.214776	365	9269.5	4453	7
F-box protein 34 (FBXO34), mRNA	NP_060413.2	NM_017943.2	mwghuman3 OK#B:4885	-1.801846	1.15594E- 06	1.13272E- -06	-7.165506	365.5	17957.5	13192.75	5
hypothetical protein xp_097916 loc150582		XM_097916	mwghuman3 OK#B:6228	-2.291304	2.69775E- 08	3.84322E- -06	-5.299383	375	3591	1276	
RNA pseudouridylat e synthase domain containing 4 (RPUSD4), mRNA	NP_116184.1	NM_032795.1	mwghuman3 OK#B:6888	-1.588438	2.0145E- 10	1.14227E- -08	-8.404434	407	15747.5	11247	5

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
WD repeat domain 33 (WDR33), transcript variant 2, mRNA	NP_0010066 23.1	NM_0010066 22.1	mwghuman3 OK#A:08115	-1.765322	1.47232E- 07	1.45307E -06	-6.190057	413	14876	13787.5	8
FLJ20859 gene (FLJ20859), transcript variant 1, mRNA	NP_0010251 62.1	NM_0010299 91.1	mwghuman3 OK#A:10470	-1.708985	8.133E-08	1.13272E -06	-6.182853	420.5	3781	2693.75	
activating transcription factor 3 (ATF3), transcript variant 2, mRNA	NP_004015.3	NM_004024.3	mwghuman3 OK#A:00568	-3.134291	8.40437E- 06	1.51698E -07	-7.446028	421	13832.5	5301.25	3
cytochrome P450, family 3, subfamily A, polypeptide 5 (CYP3A5), mRNA	NP_000768.1	NM_000777.2	mwghuman3 OK#A:04559	-2.482162	7.0225E- 08	1.9772E- 06	-4.813425	451.5	20350.5	12190.5	2
ensembl genscan prediction		AL161725.13. 1.181179.3	mwghuman3 OK#C:3443	-1.955495	1.19555E- 09	9.24336E -06	-5.681512	455	2738.5	1799	
KIT ligand (KITLG), transcript variant b, mRNA	NP_000890.1	NM_000899.3	mwghuman3 OK#A:07355	-4.28251	3.8867E- 06	7.23184E -07	-5.884133	470	19497	10599.75	2

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
decay accelerating factor for complement (CD55, Crmer blood group system) (DAF), mRNA	NP_000565.1	NM_000574.2	mwghuman3 OK#A:06760	-2.146033	1.44112E- 06	6.53282E- 06	-5.668164	471.5	9806.5	4753.25	10
solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 23 (SLC25A23), mRNA	NP_077008.2	NM_024103.2	mwghuman3 OK#A:05530	-1.465915	7.79426E- 09	8.80903E- 07	-5.741772	497	16285.5	12418.75	4
wingless-type MMTV integration site family, member 2B (WNT2B), transcript variant WNT- 2B1, mRNA	NP_004176.2	NM_004185.2	mwghuman3 OK#A:05696	-10.745275	2.92382E- 12	3.19726E- 07	-6.175471	501	10716	2016.25	0
protocadherin gamma subfamily A, 12 (PCDHGA12), transcript variant 1, mRNA	NP_003726.1	NM_003735.2	mwghuman3 OK#A:03393	-2.070447	2.89557E- 07	6.92439E- 06	-4.982742	511	2537	1931.5	0

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
ensembl gencode prediction		AC010828.3. 125573.1581 93.2	mwghuman3 OK#C:4737	-1.679465	2.34945E- 07	6.18322E- -07	-5.341693	511	26962	25287.75	
olfactory receptor, family 1, subfamily D, member 5 (OR1D5), mRNA	NP_055381.1	NM_014566.1	mwghuman3 OK#A:08766	-1.640751	5.38884E- 08	4.32856E- -06	-5.134756	539.5	1644	1134	0
G protein- coupled receptor 126 (GPR126), transcript variant b1, mRNA	NP_940971.1	NM_198569.1	mwghuman3 OK#B:2989	-2.181735	3.9002E- 07	1.05021E- -05	-5.047901	549	15965.5	8040.75	0
similar to ba408e5.4 novel protein dmpk-like cdc42-binding kinase beta cdc42bpb loc144850 ubiquitin specific		XM_090553	mwghuman3 OK#B:9158	-4.265957	2.3863E- 08	5.29006E- -07	-6.259229	573	1784	632	
peptidase 9, Y- linked (fat facets-like, Drosophila) (USP9Y), mRNA	NP_004645.2	NM_004654.3	mwghuman3 OK#A:10655	-1.584065	3.40815E- 07	8.23838E- -06	-5.287284	587	10035.5	7858.25	1

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
ensembl genscan prediction		AC022554.2.1 1725.14597.1	mwghuman3 OK#C:7523	-2.800527	1.74508E- 07	6.41199E -07	-5.902891	597	3330	1296	
solute carrier family 35 (CMP-sialic acid transporter), member A1 (SLC35A1), mRNA	NP_006407. 1	NM_006416.2	mwghuman3 OK#B:6203	-1.879113	1.20877E- 06	5.48118E -06	-5.297694	606	20639	15436.75	1
cell line sc30 t receptor alpha chain v-j junctional region tcr v 29.1 j 11 coding sequence reported spans from nucleotide position		U14083	mwghuman3 OK#B:9790	-2.442854	9.94216E- 08	1.14277E -08	-7.365379	617	6673	2661.5	
chromosome 2 open reading frame 33 (C2orf33), mRNA	NP_064579. 3	NM_020194.4	mwghuman3 OK#A:06988	-1.615311	3.24982E- 07	9.24336E -06	-5.392632	624	11555.5	8868.25	4
ensembl genscan prediction		AC073108.7.1 14033.192530 .1	mwghuman3 OK#C:4991	-2.137812	1.453E-05	1.06394E -06	-6.345675	650.5	9963.5	5676.75	

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
UDP-N-acetyl- alpha-D- galactosamine: polypeptide N- acetylglucosa- minyltransferase 7 (GALNAc- T7) (GALNT7), mRNA	NP_059119. 1	NM_017423.1	mwghuman3 OK#A:01420	-1.401046	7.53042E- 08	1.13272E- 06	-6.143981	656.5	10573	8997.75	2
chromosome 11 open reading frame 1 (C11orf1), mRNA	NP_073598. 1	NM_022761.1	mwghuman3 OK#A:01834	-1.81726	1.38032E- 06	1.22937E- 05	-5.104229	673.5	12025.5	9585.25	0
heterogeneous nuclear ribonucleoprote in H2 (H') (HNRPH2), transcript variant 1, mRNA	NP_062543. 1	NM_019597.3	mwghuman3 OK#A:08547	-2.03901	2.40065E- 06	6.16248E- 06	-5.465662	684	777	472	9
Werner syndrome (WRN), mRNA	NP_000544. 1	NM_000553.2	mwghuman3 OK#A:03163	-1.605462	7.49706E- 08	6.16248E- 06	-4.681771	696	4585	4351.25	3
ensembl genscan prediction		AC040160.3.6 1245.138821. 5	mwghuman3 OK#C:7317	-4.953847	7.54477E- 12	1.43666E- 08	-6.602968	706.5	4523.5	744.5	

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	bloo d
adducin 3 (gamma) (ADD3), transcript variant 1, mRNA	NP_058432.1	NM_016824.3	mwghuman3 OK#B:5211	-2.092475	1.34331E- 05	1.16156E -05	-5.883251	716	7668.5	4808.75	8
hydroxysteroid dehydrogenase like 2 (HSDL2), mRNA	NP_115679.2	NM_032303.2	mwghuman3 OK#B:3888	-2.1317	9.39999E- 07	5.81228E -06	-5.58267	732.5	7276.5	5055	2
DNA-damage- inducible transcript 4 (DDIT4), mRNA	NP_061931.1	NM_019058.2	mwghuman3 OK#B:2115	-2.660775	6.68834E- 05	5.16818E -06	-5.969252	750	10960.5	5062.75	12
RNA binding protein, autoantigenic (hnRNP- associated with lethal yellow homolog (mouse)) (RALY), transcript variant 1, mRNA	NP_057951.1	NM_016732.1	mwghuman3 OK#A:06376	-1.901576	1.7076E- 07	4.32856E -06	-4.392163	750.5	977	386.5	26

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
acyl-CoA synthetase medium-chain family member 3 (ACSM3), transcript variant 1, mRNA	NP_005613.2	NM_005622.3	mwghuman3 OK#B:9076	-1.967123	1.7751E- 05	7.33836E -06	-5.050721	765.5	18906.5	12252.25	3
BCL2- associated athanogene (BAG1), mRNA	NP_004314.3	NM_004323.3	mwghuman3 OK#A:09581	-2.525417	2.13163E- 08	5.29006E -07	-5.934904	776	9031	4503.5	1
neural precursor cell expressed, developmental y down- regulated 4 (NEDD4), transcript variant 1, mRNA	NP_006145.1	NM_006154.1	mwghuman3 OK#B:7862	-1.900818	3.7763E- 06	8.23334E -06	-5.249282	781	15497	12075	2
chromosome 7 open reading frame 19 (C7orf19), mRNA	NP_116220.1	NM_032831.1	mwghuman3 OK#B:2324	-1.780735	4.63759E- 06	0.000016 624	-5.43532	783	11586.5	6704.75	16
calpain 13 (CAPN13), mRNA	NP_653176.2	NM_144575.2	mwghuman3 OK#B:6754	-1.542431	4.41704E- 06	5.81228E -06	-4.843249	808.5	23318	19953.5	0
homeo box B2 (HOXB2), mRNA	NP_002136.1	NM_002145.2	mwghuman3 OK#A:01639	-2.702649	2.94498E- 11	5.08294E -08	-6.774876	814.5	11537.5	6408	3

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
coiled-coil domain containing 28A (CCDC28A), mRNA	NP_056254.1	NM_015439.2	mwghuman3 OK#B:3128	-1.960606	1.97345E- 06	5.48118E -06	-5.330597	826	19022	14223.75	4
myofibrillogene sis regulator 1 (MR-1), transcript variant 1, mRNA	NP_056303.2	NM_015488.3	mwghuman3 OK#B:3179	-1.526799	1.22924E- 05	6.92439E -06	-5.874478	832	13007	10755.75	6
guanine nucleotide binding protein (G protein), beta polypeptide 2- like 1 (GNB2L1), mRNA	NP_006089.1	NM_006098.4	mwghuman3 OK#C:0841	-1.789085	2.16356E- 06	4.35419E -05	-4.900058	844.5	1710	1178	106
spectrin repeat containing, nuclear envelope 1 (SYNE1), transcript variant beta, mRNA	NP_056108.1	NM_015293.1	mwghuman3 OK#B:9104	-1.414534	7.52733E- 07	3.02433E -06	-5.983107	851	20159.5	17233.75	64
ensembl genscan prediction		AL021155.1.1 .107603.5	mwghuman3 OK#C:7334	-1.766409	2.12121E- 06	2.01355E -05	-4.468876	853	1264	847.5	

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
bone morphogenetic protein receptor, type IA (BMPRI1A), mRNA	NP_004320.2	NM_004329.2	mwghuman3 OK#A:02484	-1.558632	2.22237E- 07	1.22937E- 05	-4.618211	874.5	5116	5037.5	4
IQ motif containing B1 (IQCB1), transcript variant 1, mRNA	NP_0010188 64.1	NM_0010235 70.1	mwghuman3 OK#B:4020	-1.646698	2.79495E- 05	1.62908E- 05	-5.169855	882.5	10922	8773.5	2
ensembl genscan prediction		AC069502.9.1 .18380.1	mwghuman3 OK#C:3663	-1.464573	6.94397E- 07	2.53657E- 05	-4.951029	901	21078	19035	
similar to death- associated protein (LOC92196), mRNA	NP_0010179 20.1	NM_0010179 20.1	mwghuman3 OK#B:6718	-2.553467	5.76345E- 07	7.76152E- 07	-5.221107	907	23255	15868	0
ensembl genscan prediction		AC012203.4.1 05191.123571 .1	mwghuman3 OK#C:4578	-1.438718	3.21936E- 05	4.85862E- 07	-5.989899	907	27071.5	25867.5	
ensembl genscan prediction mwg oligo matches these RefSeq numbers NM_000986		AL158153.8.4 5139.113162. 3	mwghuman3 OK#C:2173	-2.089238	4.80586E- 07	4.32856E- 06	-5.395407	909.5	1290	1010.25	

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
growth arrest and DNA- damage- inducible, alpha (GADD45A), mRNA	NP_001915.1	NM_001924.2	mwghuman3 OK#A:04346	-1.68216	7.53906E- 06	2.67916E- 05	-4.924921	916.5	11634.5	8596.75	3
stress 70 protein chaperone, microsome- associated, 60kDa (STCH), mRNA	NP_008879.3	NM_006948.4	mwghuman3 OK#A:05064	-1.761334	4.58163E- 05	1.72268E- 05	-5.784774	916.5	10794	6231.25	5
ensembl gensecan prediction family with sequence similarity 44, member B (FAM44B), mRNA		ZB4474.1.1.1 07526.2	mwghuman3 OK#C:0911	-1.884499	1.62444E- 08	2.23413E- 06	-5.434325	933.5	1974	1488.5	
	NP_612378.1	NM_138369.1	mwghuman3 OK#B:4192	-1.357114	7.91633E- 07	1.64431E- 06	-6.047548	942.5	15308.5	13004.75	1
ensembl gensecan prediction		AC078789.15. 1.55074.2	mwghuman3 OK#C:6283	-1.786484	1.80836E- 06	3.70831E- 05	-4.861731	948	25553.5	22990.75	
citrate lyase beta like (CLYBL), transcript variant 1, mRNA	NP_612124.3	NM_138280.3	mwghuman3 OK#B:8855	-1.444822	1.17336E- 06	5.16818E- 06	-5.775319	953	21231	19330.25	1

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
ensembl gscan prediction		AP001015.3.6 6054.115655. 1	mwghuman3 OK#C:3998	-1.709242	1.48259E- 07	7.36585E -05	-4.504002	972.5	3374.5	2739.5	
ensembl gscan prediction		AL159169.14. 1.86155.2	mwghuman3 OK#C:4465	-1.474035	8.96434E- 07	3.25437E -06	-5.020854	998.5	28575	28030	
chromosome 6 open reading frame 130 (C6orf130), mRNA	NP_659500.1	NM_145063.2	mwghuman3 OK#B:4652	-1.674296	1.77778E- 05	3.32944E -05	-4.846371	1011. 5	14804	10754.75	3
methyltransferase like 1 (METTL1), transcript variant 1, mRNA	NP_005362.1	NM_005371.3	mwghuman3 OK#A:00607	-1.464425	1.73108E- 07	5.48118E -06	-5.447819	1026	943	645.5	2
nucleosome assembly protein 1-like 4 (NAP1L4), mRNA	NP_005960.1	NM_005969.3	mwghuman3 OK#A:00706	-1.902267	1.44614E- 05	6.99321E -05	-4.962357	1042. 5	10336.5	8978.5	12
tumor protein D52 (TPD52), transcript variant 3, mRNA	NP_005070.1	NM_005079.2	mwghuman3 OK#A:05633	-1.55805	1.79544E- 06	3.15409E -05	-4.599069	1070	19033	14646.75	4
EH-domain containing 4 (EHD4), mRNA	NP_644670.1	NM_139265.2	mwghuman3 OK#B:5911	-1.64935	1.97896E- 05	3.70831E -05	-4.903865	1077	12134	9187.5	4

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
fibroblast growth factor receptor 4 (FGFR4), transcript variant 2, mRNA	NP_075252.2	NM_022963.2	mwghuman3 OK#B:8174	-2.638426	2.02402E- 06	3.21175E- 06	-6.251766	1087. 5	17096	9762.5	0
KIAA0674 (KIAA0674), mRNA	XP_376903.2	XM_376903.2	mwghuman3 OK#B:0240	-1.362276	3.68739E- 06	3.62055E- 06	-5.432041	1092. 5	10744	9097.25	4
chromosome 16 bac clone cl987/sk-a- 363e6		U91321	mwghuman3 OK#B:5375	-1.568388	5.91844E- 05	6.53282E- 06	-6.349455	1114. 5	10576.5	6083.25	
ensembl genscan prediction		AC073610.11. 63494.102478 .3	mwghuman3 OK#C:1337	-1.828108	1.68631E- 06	1.30096E- 05	-5.253574	1114. 5	1434.5	737	
androgen receptor (AR), transcript variant 1, mRNA	NP_000035.2	NM_000044.2	mwghuman3 OK#A:01003	-1.575215	1.18973E- 07	1.54035E- 05	-4.291628	1120. 5	18067.5	15252.5	0
thyroid transcription factor 1 (TTF1), mRNA	NP_003308.1	NM_003317.3	mwghuman3 OK#A:07197	-1.466987	8.57665E- 07	1.54585E- 06	-6.023277	1124. 5	2139	1026.25	0

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
spectrin repeat containing, nuclear envelope 1 (SYNE1), transcript variant longest, mRNA	NP_892006.1	NM_182961.1	mwghuman3 OK#C:2340	-1.440164	6.37872E- 05	2.15085E -05	-5.805222	1124. 5	26092.5	21681.5	64
ensembl genscan prediction		AC019084.7.9 3515.134992. 2	mwghuman3 OK#C:5482	-1.55364	1.48892E- 06	7.77593E -06	-5.043927	1126. 5	8785.5	8789.5	
ensembl genscan prediction		AC026235.12. 9210.157122. 4	mwghuman3 OK#C:3969	-1.693854	8.74991E- 08	0.000122 803	-4.393663	1136. 5	804	493.5	
ensembl genscan prediction		AP002840.1.9 9623.121675. 1	mwghuman3 OK#C:5950	-1.784079	2.96992E- 05	7.75722E -05	-4.69759	1156	16693.5	14033.25	
CDC-like kinase 1 (CLK1), transcript variant 1, mRNA	NP_004062.2	NM_004071.2	mwghuman3 OK#A:07840	-2.034707	6.15281E- 05	6.99321E -05	-5.146308	1157. 5	12199	7934.75	4
lipin 1 (LPIN1), mRNA	NP_663731.1	NM_145693.1	mwghuman3 OK#B:8172	-1.851742	1.40757E- 07	2.98753E -05	-4.301729	1159. 5	3757	2609	2
lamin A/C (LMNA), transcript variant 2, mRNA	NP_005563.1	NM_005572.2	mwghuman3 OK#A:08943	-1.724223	9.63727E- 05	5.67358E -05	-5.305029	1162. 5	4447	3295	10
ensembl genscan prediction		AC079456.15. 119608.15149 0.1	mwghuman3 OK#C:3309	-1.39662	6.38081E- 06	4.32856E -06	-6.439308	1169. 5	26755.5	26493.5	

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
similar to riken cdna 1500002b03 clone mgc:12928 image:429841 4		BC007768	mwghuman3 OK#B:4242	-1.518362	5.21322E- 06	3.51403E -05	-4.463332	1171	21159	20375	
ensembl gscan prediction		AC027086.2.2 3033.31927.1	mwghuman3 OK#C:6982	-1.659003	1.16113E- 11	3.82785E -07	-6.295271	1172. 5	2757	2062.75	
hyaluronogluco saminidase 3 (HYAL3), mRNA	NP_003540.2	NM_003549.2	mwghuman3 OK#A:09529	-2.01277	6.70905E- 08	1.16156E -05	-4.684969	1175	4326	3464.5	4
ensembl gscan prediction		AC083822.10. 126464.12912 2.1	mwghuman3 OK#C:9101	-1.479602	6.01319E- 06	2.53657E -05	-4.526959	1177	22091.5	20578.5	
VprBP protein (VprBP), mRNA	NP_055518.1	NM_014703.1	mwghuman3 OK#B:0332	-1.720326	3.28082E- 05	2.40122E -05	-5.246863	1178	17312.5	14031	0
nuclear RNA export factor 1 (NXF1), mRNA	NP_006353.2	NM_006362.3	mwghuman3 OK#B:1047	-1.485619	7.48559E- 05	1.62908E -05	-5.176445	1195. 5	15210	14049.75	20
empty spiracles homolog 2 (Drosophila) (EMX2), mRNA	NP_004089.1	NM_004098.2	mwghuman3 OK#B:9279	-1.745086	9.4996E- 09	5.64117E -07	-5.709572	1199. 5	19380	10749.25	0
homeo box D8 (HOXD8), mRNA	NP_062458.1	NM_019558.2	mwghuman3 OK#B:3465	-1.41555	6.70306E- 08	2.1019E- 06	-5.674131	1206	9672.5	7512.25	0

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
pro2591 predicted protein of hg2591		AF119886	mwghuman3 OK#B:1001	-1.487408	7.83971E- 05	1.30297E- -05	-4.929888	1212	27543.5	28699	0
ensembl gensecan prediction		AC016432.3.1 6946.19371.1	mwghuman3 OK#C:6058	-3.528975	4.33482E- 13	5.08294E- -08	-6.731611	1216. 5	3962.5	1303	
ensembl gensecan prediction		AF286885.1.7 6372.115954. 3	mwghuman3 OK#C:7800	-1.83051	1.14443E- 05	5.11795E- -05	-4.359199	1218	21163.5	21224.5	
zinc finger protein 25 (KOX 19) (ZNF25), mRNA	NP_659448.1	NM_145011.2	mwghuman3 OK#C:1648	-1.473477	6.43814E- 09	4.35863E- -07	-5.84264	1253. 5	21026.5	19171	1
zinc finger protein 626 (ZNF626), mRNA	NP_660340.1	NM_145297.2	mwghuman3 OK#B:4148	-1.773183	2.31455E- 06	6.63845E- -05	-4.294361	1266	14806.5	10341	1
growth arrest and DNA- damage- inducible, beta (GADD45B), mRNA	NP_056490.1	NM_015675.1	mwghuman3 OK#A:00537	-1.950707	0.0002000 32	2.03519E- -05	-5.558029	1270. 5	13309	8615.5	5
nebulin (NEBL), transcript variant 1, mRNA	NP_006384.1	NM_006393.1	mwghuman3 OK#A:10459	-1.513391	1.95755E- 05	3.15409E- -05	-4.789714	1276	22936	20052.5	1

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
hypothetical protein pro2832 pro2832		NM_018541	mwghuman3 OK#A:00371	-1.457098	3.06355E- 05	6.99321E- 05	-5.164495	1289. 5	16692.5	14266.5	
ring finger protein 44 (RNF44), mRNA	NP_055716.1	NM_014901.4	mwghuman3 OK#A:10680	-1.353366	7.76079E- 07	2.37433E- 06	-5.842265	1292	6288.5	4664.5	1
REX1, RNA exonuclease 1 homolog (S. cerevisiae) (REXO1), mRNA	NP_065746.2	NM_020695.2	mwghuman3 OK#B:8218	-1.36867	1.73225E- 05	2.38069E- 05	-5.111364	1305. 5	4933	3309.5	6
pyrimidinergic receptor P2Y, G-protein coupled, 4 (P2RY4), mRNA	NP_002556.1	NM_002565.3	mwghuman3 OK#A:00433	-1.732075	5.0193E- 08	2.68048E- 06	-5.510614	1309	18307	12139.5	0
ensembl genscan prediction		AL023804.2.1 .96460.1	mwghuman3 OK#C:5405	-1.533348	1.03637E- 06	2.806E- 05	-4.693772	1313	28610	27980.5	
ensembl genscan prediction		AL139823.3.4 9422.51911.1	mwghuman3 OK#C:8800	-1.894452	4.41409E- 05	0.000129 14	-4.650026	1320	11214.5	7548	
similar to hypothetical protein (LOC440804), mRNA	XP_036936.3	XM_036936.3	mwghuman3 OK#B:4832	-4.049648	5.38047E- 11	1.51698E- 07	-6.579174	1332	3647	996.5	0

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
chromosome X open reading frame 41 (CXorf41), mRNA	NP_775765.1	NM_173494.1	mwghuman3 OK#C:1526	-1.448331	1.77872E- 05	2.53657E -05	-5.140193	1334	27414	24062.75	0
chromosome 20 open reading frame 152 (C20orf152), mRNA	NP_543024.1	NM_080834.1	mwghuman3 OK#B:3251	-1.948612	6.84261E- 06	1.82138E -05	-4.987586	1349	10775	8652.5	0
ensembl genscan prediction		AL390766.11. 35686.142382 .1	mwghuman3 OK#C:4546	-1.516487	5.60986E- 05	4.81914E -05	-4.642986	1352	28469.5	27078.25	
phosphorylase, glycogen; liver (Hers disease, glycogen storage disease type VI) (PYGL), mRNA	NP_002854.3	NM_002863.3	mwghuman3 OK#A:04342	-2.190281	5.14475E- 06	0.000269 936	-4.316788	1388. 5	10289.5	7222	21
ensembl genscan prediction		AC013764.3.1 17501.157349 .1	mwghuman3 OK#C:3627	-1.671949	8.77886E- 06	7.36585E -05	-4.28185	1395. 5	1205	826.5	
folistatin-like 4 (FSTL4), mRNA	NP_055897.1	NM_015082.1	mwghuman3 OK#B:0510	-1.544042	4.79688E- 05	4.35419E -05	-4.607654	1405. 5	17051	12319	0

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
chromosome 14 open reading frame 168 (C14orf168), mRNA	NP_113615.1	NM_031427.1	mwghuman3 OK#B:4011	-1.512002	1.56095E- 05	5.97939E- 05	-4.695177	1414	15738	14705.75	1
aldehyde dehydrogenas e 7 family, member A1 (ALDH7A1), mRNA	NP_001173.1	NM_001182.2	mwghuman3 OK#A:08361	-1.837545	4.80787E- 07	0.000105 506	-3.903403	1433	20103.5	14345.5	2
ensembl gensecan prediction		AC010904.9.3 83.204857.4	mwghuman3 OK#C:7433	-1.40403	4.74755E- 05	3.07694E- 05	-4.852328	1444	27423.5	25979.25	
kallikrein 8 (neuropsin/ova sin) (KLK8), transcript variant 2, mRNA	NP_653088.1	NM_144505.1	mwghuman3 OK#B:0129	-2.091505	3.56009E- 06	2.61655E- 06	-5.991679	1449. 5	8391	6488	0
leucine zipper, down-regulated in cancer 1-like (LDOC1L), mRNA	NP_115663.2	NM_032287.2	mwghuman3 OK#B:8710	-1.501021	2.6566E- 06	1.22937E- 05	-4.280727	1454. 5	16509.5	14157	0
two pore segment channel 1 (TPCN1), mRNA	NP_060371.2	NM_017901.3	mwghuman3 OK#B:7759	-1.497443	4.32588E- 06	3.32944E- 05	-4.567011	1460. 5	17545	11635.75	8

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
hypothetical protein MGC11242 (MGC11242), mRNA	NP_077296.1	NM_024320.2	mwghuman3 OK#A:05130	-1.527839	2.70218E- 05	1.72268E- 05	-4.004461	1463. 5	17565	13134.5	0
phosphofurin acidic cluster sorting protein 1 (PACS1), mRNA	NP_060496.2	NM_018026.2	mwghuman3 OK#B:7703	-1.494259	5.23361E- 05	7.36585E- 05	-4.899266	1482. 5	9352	7757.75	19
hypothetical protein xp_036406 loc91138		XM_036406	mwghuman3 OK#B:8080	-1.533764	1.02161E- 05	4.59223E- 05	-4.93538	1486. 5	15372.5	14652	
KIAA1274 (KIAA1274), mRNA	NP_055246.1	NM_014431.1	mwghuman3 OK#B:8047	-1.41942	7.87044E- 05	2.27276E- 05	-5.659345	1488. 5	8059	5065	0
ensembl gensecan prediction		AC090651.1.9 901.36661.2	mwghuman3 OK#C:6027	-1.525691	2.39913E- 05	7.36585E- 05	-4.620984	1489. 5	21092	20253	
hypothetical protein FLJ13111 (FLJ13111), mRNA	NP_079358.1	NM_025082.1	mwghuman3 OK#A:02690	-1.496988	3.69096E- 05	7.08197E- 05	-4.489468	1494	4861	7579.25	10
glycophorin C (Gerbich blood group) (GYPC), transcript variant 1, mRNA	NP_002092.1	NM_002101.3	mwghuman3 OK#A:01278	-1.628829	9.49623E- 06	0.000135 784	-4.110107	1502	8042	6771	2

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
hypothetical LOC401510 (LOC401510), mRNA	XP_376843.2	XM_376843.2	mwghuman3 OK#B:6807	-1.402922	3.03035E- 06	0.000105 506	-4.471835	1504	13882.5	11233.25	0
ensembl gscan prediction		AC068282.4.1 68870.201224 .1	mwghuman3 OK#C:1421	-1.273265	1.4683E- 06	4.32856E -06	-5.673395	1505. 5	4650	3232.25	
phospholipase A2, group IVA (cytosolic, calcium- dependent) (PLA2G4A), mRNA	NP_077734.1	NM_024420.1	mwghuman3 OK#C:2726	-1.656839	1.32347E- 05	2.82936E -05	-4.522341	1508. 5	17687.5	14140.5	5
plasmin 1 (I isoform) (PLS1), mRNA	NP_002661.1	NM_002670.1	mwghuman3 OK#A:06551	-1.626206	5.67628E- 05	2.98753E -05	-4.952263	1509. 5	20943	14040.5	1
neurobeachin- like 1 (NBEAL1), mRNA	NP_945183.1	NM_198945.1	mwghuman3 OK#C:8646	-1.528665	7.51176E- 06	2.82936E -05	-5.005478	1511. 5	23554.5	20060	3
alcohol dehydrogenas e 4 (class II), pi polypeptide (ADH4), mRNA	NP_000661.2	NM_000670.3	mwghuman3 OK#A:04002	-1.485933	6.40488E- 05	7.36585E -05	-4.608649	1520. 5	22288	20240.75	0

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
clone rp5-94718 on chromosome 1p34.1-36.11. contains ests gss and siss. part of novel cub sushi scr repeat domain containing p cytochrome b5 reductase 3 (CYB5R3), transcript variant M, mRNA	NP_000389.1	NM_000398.4	mwghuman3 OK#B:9614	-1.466888	8.43097E- 06	3.15409E -05	-4.397922	1529	4947.5	4650.25	
clone flb5634 pro1477 predicted protein of hq1477		AF130059	mwghuman3 OK#B:1074	-1.699661	1.17568E- 05	3.32944E -05	-4.802532	1535	5685	3946.75	10
zinc finger, DHHC-type containing 2 (ZDHHIC2), mRNA	NP_057437.1	NM_016353.2	mwghuman3 OK#A:03494	-1.588633	8.03858E- 06	0.000105 506	-4.741236	1536	13684.5	10087.5	0
cone-rod homeobox (CRX), mRNA	NP_000545.1	NM_000554.2	mwghuman3 OK#A:09219	-3.022299	2.51326E- 05	9.24336E -06	-5.849282	1548	16588.5	7500.5	0

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
chromosome 14 open reading frame 154 (C14orf154), transcript variant 1, mRNA	NP_115609.2	NM_032233.2	mwghuman3 OK#B:2665	-1.704609	8.00302E- 05	0.000166 293	-4.427372	1561. 5	16629	15080.75	5
hypothetical protein xp_098665 loc155085		XM_098665	mwghuman3 OK#B:6056	-1.672814	4.27782E- 05	0.000142 749	-4.312941	1566. 5	8795	6847.25	
clone hq0117 pro0117		AF090895	mwghuman3 OK#B:0914	-1.888405	1.18377E- 05	9.05266E- 05	-4.735768	1570. 5	20158	14933.5	4
prostate and breast cancer overexpressed 1 (PBOV1), mRNA	NP_067648.1	NM_021635.1	mwghuman3 OK#A:05114	-1.610345	5.40979E- 06	8.1682E- 05	-4.437567	1571. 5	22494.5	19845.75	0
esterase D/foamylglutath ione hydrolase (ESD), mRNA	NP_001975.1	NM_001984.1	mwghuman3 OK#C:2641	-1.535083	6.75303E- 06	4.84259E- 05	-4.777065	1574	8049	4838.75	6
ATG4 autophagy related 4 homolog B (S. cerevisiae) (ATG4B), transcript variant 1, mRNA	NP_037457.3	NM_013325.4	mwghuman3 OK#B:2748	-1.348856	8.59727E- 06	1.6224E- 05	-4.71932	1575	15166	16712.25	13

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
NADPH oxidase 1 (NOX1), transcript variant NOH- 1Lv, mRNA	NP_039249.1	NM_013955.1	mwghuman3 OK#B:1370	-1.903809	5.04367E- 06	2.65189E- 05	-3.799677	1585. 5	18807.5	17371.5	0
ensembl genscan prediction		AL445675.9.1 .171985.3	mwghuman3 OK#C:8741	-1.774793	2.60881E- 05	0.000182 916	-4.133137	1598	22483.5	18071.5	
putative nuclear protein ORF1-FL49 (ORF1-FL49), mRNA	NP_115788.1	NM_032412.2	mwghuman3 OK#B:7958	-1.499659	6.10749E- 05	3.32944E- 05	-4.457256	1610. 5	8598	4986	8
THUMP domain containing 1 (THUMPD1), mRNA	NP_060206.2	NM_017736.3	mwghuman3 OK#B:2088	-1.313257	4.11592E- 07	6.53282E- 06	-5.325518	1651. 5	14877	15313.5	0
glutaminyl- peptide cyclotransferas e (glutaminyl cyclase) (QPCT), mRNA	NP_036545.1	NM_012413.3	mwghuman3 OK#A:09422	-1.769571	4.69509E- 07	0.000122 803	-3.882851	1651. 5	11960	8357.75	2
PHD finger protein 23 (PHF23), mRNA	NP_077273.1	NM_024297.1	mwghuman3 OK#A:02678	-1.398461	1.43961E- 05	0.000109 884	-4.356774	1657. 5	10656.5	9355.75	0

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
nasopharyngeal carcinoma associated gene protein-8 (NAG8), mRNA	NP_055226.1	NM_014411.2	mwghuman3 OK#B:1482	-1.388055	2.38325E-05	5.10584E-05	-4.601658	1660	15731.5	12161	0
ensembl gencode prediction		AC013487.5.1 02379.117540.1	mwghuman3 OK#C:3348	-1.465932	0.000144857	2.37433E-06	-6.225756	1662	14711	9423	
ensembl gencode prediction		AC079757.5.5 4037.62672.1	mwghuman3 OK#C:3844	-1.486502	2.69625E-05	4.12788E-05	-4.765229	1684.5	25678.5	23575.5	
hypothetical protein FLJ22313 (FLJ22313), mRNA	NP_071768.2	NM_022373.3	mwghuman3 OK#B:3974	-1.47429	0.000104725	5.67358E-05	-4.784258	1688.5	8360.5	9165.25	2
holocytochrome c synthase (cytochrome c heme-lyase) (HCCS), mRNA	NP_005324.2	NM_005333.2	mwghuman3 OK#A:04510	-2.084412	0.000332632	0.000211886	-5.979649	1692.5	10130.5	5488.25	4
dual specificity phosphatase 5 (DUSP5), mRNA	NP_004410.3	NM_004419.3	mwghuman3 OK#A:04028	-1.866767	5.52516E-05	2.27276E-05	-5.708882	1694.5	16243.5	8885	2
hypothetical protein FLJ20245 (FLJ20245), mRNA	NP_060193.1	NM_017723.1	mwghuman3 OK#B:2083	-1.525601	6.09068E-05	0.00011676	-4.325517	1697	16122	13101	3

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
protein kinase, AMP-activated, gamma 2 non- catalytic subunit (PRKAG2), mRNA	NP_057287.2	NM_016203.2	mwghuman3 OK#A:00771	-1.408092	1.41299E- 05	8.59969E- 05	-4.435082	1697. 5	16315.5	13437.25	5
clone rp11- 314a4 on chromosome 20. contains part of the eya2 eyes absent drosophila homolog 2 ests an sts and gss starts i hypothetical protein pro1598 pro1598		AL359434	mwghuman3 OK#B:9638	-1.591958	1.67257E- 05	6.56055E- 05	-4.203762	1702	25348.5	23840.75	
NIMA (never in mitosis gene a)- related kinase 9 (NEK9), mRNA	NP_149107.3	NM_033116.3	mwghuman3 OK#B:0983	-1.446989	3.89533E- 06	1.30096E- 05	-5.339446	1716. 5	24112.5	22618.75	
glycine receptor, alpha 3 (GLRA3), mRNA	NP_006520.1	NM_006529.1	mwghuman3 OK#A:03690	-1.412224	0.0001037 63	4.35419E- 05	-4.78725	1722. 5	10134.5	7455.5	5
						8.1682E- 05	-4.59741	1726	9472.5	8083.25	2

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
ensembl gscan prediction		AC004408.1.1 .113252.2	mwghuman3 OK#C:9512	-1.54073	2.55537E- 06	1.54035E -05	-3.618774	1727	2977	2622.75	
ensembl gscan prediction		AP001655.2.1 48977.153525 .1	mwghuman3 OK#C:7868	-1.285997	2.64478E- 05	1.96829E -05	-4.601991	1746	28566	28245.5	
HERV-H LTR- associating 3 (HLA3), transcript variant 3, mRNA	NP_0010317 22.1	NM_0010366 45.1	mwghuman3 OK#B:1046	-2.043346	8.67677E- 05	9.52067E -05	-3.941702	1759	13925.5	11798	0
ensembl gscan prediction		AL355497.14. 1.215397.9	mwghuman3 OK#C:7911	-3.056765	1.10766E- 06	3.82785E -07	-6.916789	1760	5672.5	2481.25	
fibronectin leucine rich transmembran e protein 3 (FLRT3), transcript variant 1, mRNA	NP_037413.1	NM_013281.2	mwghuman3 OK#A:05822	-4.204569	1.4941E- 08	9.99201E -07	-6.042443	1770	18156	9231.25	0
cyp3a5 allele cyp3a5*3 alternatively spliced		AF355802	mwghuman3 OK#B:1830	-1.371576	7.33293E- 06	1.91497E -05	-4.362299	1784	26198.5	24518.25	

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
microfibrillar- associated protein 3-like (MFAP3L), transcript variant 1, mRNA	NP_067679.5	NM_021647.5	mwghuman3 OK#B:0217	-1.987417	0.0001373 75	1.98715E -06	-4.959479	1785	22262	18475.25	3
cell division cycle associated 7 (CDC47), transcript variant 1, mRNA	NP_114148.2	NM_031942.3	mwghuman3 OK#B:4810	-1.959598	9.26637E- 05	0.000150 05	-4.246093	1788	14826	12577.25	1
WD repeat domain 61 (WDR61), mRNA	NP_079510.1	NM_025234.1	mwghuman3 OK#B:1624	-1.531798	0.0001544 91	0.000105 506	-4.38785	1801. 5	9756.5	8041.75	3
protein kinase, AMP-activated, beta 1 non- catalytic subunit (PRKAB1), mRNA	NP_006244.2	NM_006253.4	mwghuman3 OK#A:04996	-1.514877	9.29449E- 05	0.000105 506	-4.4366	1805. 5	16011.5	13954	3
zinc finger, A20 domain containing 2 (ZA20D2), mRNA	NP_005998.1	NM_006007.1	mwghuman3 OK#A:10213	-1.857923	2.78106E- 06	2.67916E -05	-4.781221	1808. 5	6856.5	4563.25	13
similar to pro2852 loc93374		XM_050978	mwghuman3 OK#B:7206	-1.359998	8.48914E- 05	6.30077E -05	-5.206744	1817	19166	16438	

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
catalase (CAT), mRNA	NP_001743.1	NM_001752.2	mwghuman3 OK#C:3530	-2.225675	8.1938E- 07	6.92439E- -06	-4.777325	1820	7219.5	4208.75	31
peptidylprolyl isomerase (cyclophilin)- like 2 (PPII2), transcript variant 2, mRNA	NP_680480.1	NM_148175.1	mwghuman3 OK#B:6262	-1.384263	4.77437E- 07	4.59274E- -06	-5.396075	1834. 5	3806	3514	5
perlecan (PRX), transcript variant 2, mRNA	NP_870998.1	NM_181882.1	mwghuman3 OK#A:01781	-1.399169	1.03356E- 05	6.63845E- -05	-4.549994	1838	19643.5	17122.5	0
breast carcinoma amplified sequence 3 (BCAS3), mRNA	NP_060149.2	NM_017679.2	mwghuman3 OK#A:01576	-1.41274	2.55423E- 07	3.64015E- -06	-4.03611	1839	15754.5	17960.25	2
HtrA serine peptidase 2 HTRA2	AAF66598.1	AF141307.1	mwghuman3 OK#B:1170	-1.284282	2.27894E- 05	1.86362E- -05	-4.071282	1850	22760.5	20044.75	
ensembl genscan prediction		AC012095.13. 12848.17419. 1	mwghuman3 OK#C:7012	-1.517696	0.0001343 14	0.000172 435	-4.407333	1854	26139.5	25010.5	
formin binding protein 4 (FBNP4), mRNA	NP_056123.1	NM_015308.1	mwghuman3 OK#B:8897	-1.360042	0.0001194 22	2.15085E- -05	-5.532889	1855	17142	14814.25	11

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
aldehyde dehydrogenas e 1 family, member L1 (ALDH1L1), mRNA	NP_036322.2	NM_012190.2	mwghuman3 OK#A:07479	-2.396851	2.32809E- 05	0.000157 701	-3.740555	1856. 5	13469	8189.5	3
ensembl genscan prediction		AP001487.3.8 5282.114407. 1	mwghuman3 OK#C:8733	-1.603991	4.09016E- 06	5.97939E -05	-4.353485	1870	3882	3994.75	
ensembl genscan prediction		AC015651.18. 1.191583.4	mwghuman3 OK#C:2191	-1.392136	5.55423E- 07	1.72268E -05	-4.562358	1873. 5	2463	1928.25	
OTU domain containing 5 (OTUD5), mRNA	NP_060072.1	NM_017602.2	mwghuman3 OK#B:7999	-1.721318	3.42749E- 06	1.37651E -05	-5.356883	1894. 5	1453	1011	14
ensembl genscan prediction		AC026668.5.8 4589.93793.1	mwghuman3 OK#C:5546	-1.668723	3.74924E- 06	2.40122E -05	-5.209366	1899	3201	1676.5	
chromosome 20 open reading frame 121 (C20orf121), mRNA	NP_077307.1	NM_024331.2	mwghuman3 OK#A:03031	-1.520517	5.93503E- 08	1.82138E -05	-4.163768	1906	8788	6894	2
pyruvate dehydrogenas e kinase, isozyme 4 (PDK4), mRNA	NP_002603.1	NM_002612.2	mwghuman3 OK#A:07564	-1.735687	1.72294E- 05	1.22937E -05	-5.445156	1911. 5	18067	13997.25	1

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
KIAA1049 protein (KIAA1049), mRNA	NP_055787.1	NM_014972.1	mwghuman3 OK#B:2555	-1.400381	1.30483E- 05	7.36585E- 05	-4.350759	1913. 5	10972	8868.5	12
DnaJ (Hsp40) homolog, subfamily B, member 6 (DNAJB6), transcript variant 1, mRNA	NP_490647.1	NM_058246.3	mwghuman3 OK#A:04664	-1.455502	9.60314E- 05	0.000150 05	-4.286094	1917	3609	2895.5	14
lectin, galactoside- binding, soluble, 3 (galectin 3) (LGALS3), mRNA	NP_002297.1	NM_002306.1	mwghuman3 OK#A:10306	-1.93733	6.69527E- 06	2.55121E- 05	-4.690215	1923	2753	1803.5	6
PTPRF interacting protein, binding protein 2 (lpin beta 2) (PPFIBP2), mRNA	NP_003612.1	NM_003621.1	mwghuman3 OK#B:0552	-1.881545	1.28489E- 06	2.98753E- 05	-4.14602	1937. 5	6372.5	4594.5	2
polymerase (DNA directed), lambda (POLL), mRNA	NP_037406.1	NM_013274.2	mwghuman3 OK#B:1279	-1.399567	3.5582E- 05	2.98753E- 05	-4.793654	1938	15108.5	11461.25	8

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
growth differentiation factor 15 (GDF15), mRNA	NP_004855.1	NM_004864.1	mwghuman3 OK#A:07217	-2.483648	0.0002241 34	0.000257 25	-4.296268	1944	6377	3127.5	2
hypothetical protein xp_089809 loc159765		XM_089809	mwghuman3 OK#B:6474	-1.381507	9.90157E- 07	2.40122E- 05	-4.093057	1949	11626.5	11522.5	
leucine rich repeat and sterile alpha motif containing 1 (LRSAM1), transcript variant 1, mRNA	NP_612370.3	NM_138361.3	mwghuman3 OK#B:4416	-2.034574	0.0001840 31	0.000233 537	-4.13512	1959. 5	7671.5	4421.75	1
trafficking protein particle complex 6A (TRAPPC6A), mRNA	NP_077013.1	NM_024108.1	mwghuman3 OK#A:02117	-1.452954	2.44741E- 06	2.53657E- 05	-3.509555	1985	1279	1294	8
ensembl genscan prediction		AL357146.10. 1.82494.1	mwghuman3 OK#C:3608	-1.287782	1.49736E- 05	6.05474E- 05	-4.826559	1989	28444.5	26083.25	
hypothetical protein MGC14327 (MGC14327), mRNA	NP_444273.1	NM_053045.1	mwghuman3 OK#B:4427	-1.504495	0.0001502 58	0.000174 117	-4.521635	1992	16805	15440.5	4

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
similar to kinesin family member 5b clone mgc:15265 image:429779 3		BC009353	mwghuman3 OK#B:4438	-1.51682	0.0001882 14	0.000192 131	-4.531075	1992	23071.5	21809.75	
potassium channel tetramerisation domain containing 3 (KCTD3), mRNA	NP_057205.2	NM_016121.3	mwghuman3 OK#A:04386	-1.358006	1.34593E- 05	5.38262E- 05	-4.810824	1994. 5	17479.5	13203.75	3
ensembl gensecan prediction guanine nucleotide binding protein (G protein), alpha inhibiting activity		AC018425.3.1 53134.186975 .1	mwghuman3 OK#C:3925	-1.496534	0.0001495 25	0.000192 131	-4.315259	1997	25336	25414.75	
polypeptide 1 (GNAI1), mRNA	NP_002060.4	NM_002069.4	mwghuman3 OK#A:10201	-1.631361	5.34686E- 06	0.000433 377	-3.885346	2003	16803.5	14082	1
microtubule- associated protein 4 (MAP4), transcript variant 1, mRNA	NP_002366.2	NM_002375.3	mwghuman3 OK#B:4355	-1.468752	0.0001551 87	0.000257 25	-4.423897	2004	10052	9080	11

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
nucleolar protein family 6 (RNA- associated) (NOL6), transcript variant alpha, mRNA	NP_075068.2	NM_022917.4	mwghuman3 OK#A:07182	-1.30257	1.12604E- 06	3.70831E- 05	-4.767639	2009	10513	8821	7
cerebral endothelial cell adhesion molecule 1 (CEECAM1), mRNA	NP_057258.2	NM_016174.3	mwghuman3 OK#A:10231	-1.516413	4.80848E- 05	0.000109 198	-3.667581	2014	16662.5	13757.75	0
ubiquinol- cytochrome c reductase, complex III subunit VII, 9.5kDa (UQCQRQ), nuclear gene encoding mitochondrial protein, mRNA	NP_055217.2	NM_014402.3	mwghuman3 OK#B:8060	-1.71221	4.79681E- 05	4.35419E- 05	-5.049156	2014	4199.5	2985.25	14
hypothetical protein xp_092745 loc164337		XM_092745	mwghuman3 OK#B:3255	-1.386871	3.26973E- 05	0.000165 718	-4.513374	2041	19510	15741.25	

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
hypothetical protein FLJ22965 (FLJ22965), mRNA	NP_071384.1	NM_022101.2	mwghuman3 OK#A:09776	-1.903469	7.16955E- 05	0.000475 592	-4.078844	2041. 5	2596	2337	0
chromosome 9 open reading frame 102 (C9orf102), transcript variant 1, mRNA	NP_064592.1	NM_020207.2	mwghuman3 OK#B:6956	-1.369819	3.05523E- 05	0.000105 506	-4.676244	2049	16457.5	13970	0
sphingosine-1- phosphate phosphatase 1 (SGPP1), mRNA	NP_110418.1	NM_030791.2	mwghuman3 OK#B:1809	-1.477332	4.90035E- 05	0.000142 749	-4.328137	2062. 5	20094	17541.5	1
pleckstrin and Sec7 domain containing 3 (PSD3), transcript variant 1, mRNA	NP_056125.2	NM_015310.2	mwghuman3 OK#B:9515	-1.395381	2.70551E- 05	0.000142 896	-3.953529	2072	14023	13223.25	1
hypothetical protein LOC283874 (LOC283874), mRNA	NP_0010127 49.1	NM_0010127 31.1	mwghuman3 OK#B:2101	-1.376341	1.45793E- 05	2.67916E -05	-5.079903	2090. 5	23511.5	23000	1

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
zinc finger, FYVE domain containing 21 (ZFVE21), mRNA	NP_076976.1	NM_024071.2	mwghuman3 OK#A:05642	-1.579562	0.0001142 53	0.000342 648	-4.238027	2094	2994.5	2740.25	0
forkhead box E1 (thyroid transcription factor 2) (FOXE1), mRNA	NP_004464.2	NM_004473.3	mwghuman3 OK#A:07899	-1.678652	1.3104E- 05	0.000192 131	-3.837954	2107	7269	5293.75	0
ensembl genscan prediction		AL158168.17. 82811.114103 .1	mwghuman3 OK#C:5892	-1.54059	5.72345E- 05	8.88591E- 06	-4.136599	2114	28578	27753.75	
similar to per- hexamer repeat protein 5 loc149135		XM_089208	mwghuman3 OK#B:9694	-1.363387	0.0001055 64	3.77672E- 05	-3.9371	2131	27002.5	27249.5	
zinc finger, matrin type 1 (ZMAT1), transcript variant 3, mRNA	NP_115817.1	NM_032441.1	mwghuman3 OK#C:0106	-1.423696	0.0001562 67	0.000211 886	-4.538065	2134. 5	20339.5	17190.25	2
endoplasmic reticulum to nucleus signalling 2 (ERN2), mRNA	NP_150296.2	NM_033266.2	mwghuman3 OK#B:9444	-1.735187	1.98165E- 05	2.70994E- 05	-4.509363	2135	24789	18903	0

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
ring finger protein 38 (RNF38), transcript variant 1, mRNA	NP_073618.3	NM_022781.3	mwghuman3 OK#B:5588	-1.302965	2.50283E- 06	2.15085E- 05	-4.986001	2138	24546.5	22148.75	1
Myc-induced mitochondria protein (mimifin), mRNA	NP_777549.1	NM_174889.2	mwghuman3 OK#B:3716	-1.474873	8.439E-05	0.000359 234	-4.207401	2151. 5	9215	7030.25	1
TGF beta- inducible nuclear protein 1 (TINP1), mRNA	NP_055701.1	NM_014886.2	mwghuman3 OK#A:06520	-1.655993	0.0003187 59	0.000571 767	-4.796546	2153	7530	5545.5	6
similar to developmental pluripotency associated 5; embryonal stem cell specific gene 1 (LOC341912), mRNA	XP_292301.3	XM_292301.3	mwghuman3 OK#B:8134	-1.639786	7.64251E- 07	4.32856E- 06	-5.437632	2155	18581.5	12815.25	1
dehydrogenas e/reductase (SDR family) member 3 (DHRS3), mRNA	NP_004744.2	NM_004753.4	mwghuman3 OK#B:0738	-1.439285	4.39582E- 05	0.000222 464	-3.974197	2166. 5	4626	3570	3

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
flavin containing monooxygenas e 4 (FMO4), mRNA	NP_002013.1	NM_002022.1	mwghuman3 OK#B:2927	-1.804252	0.0001959 67	0.000222 464	-4.159771	2173. 5	21428	18241	1
ensembl genscan prediction		AC022526.4.9 087.13827.1	mwghuman3 OK#C:9081	-1.518222	0.0001264 09	0.000174 117	-4.437239	2174	25713.5	23316	
serologically defined colon cancer antigen 8 (SDCCAG8), mRNA	NP_006633.1	NM_006642.1	mwghuman3 OK#B:4992	-1.359218	5.81032E- 06	1.22937E -05	-4.628131	2177. 5	18548	16566	4
CDC14 cell division cycle 14 homolog B (S. cerevisiae) (CDC14B), transcript variant 2, mRNA	NP_201588.1	NM_033331.1	mwghuman3 OK#B:0753	-1.438486	0.0001500 76	0.000245 124	-4.702655	2178. 5	23322	22971	2
myeloid/lymph oid or mixed- lineage leukemia (tltthorax homolog, Drosophila); translocated to, 3 (MLLT3), mRNA	NP_004520.1	NM_004529.1	mwghuman3 OK#A:00725	-1.503791	3.87447E- 05	0.000311 603	-4.282874	2188	20164.5	17462	4

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
cytochrome P450, family 27, subfamily A, polypeptide 1 (CYP27A1), nuclear gene encoding mitochondrial protein, mRNA	NP_000775.1	NM_000784.2	mwghuman3 OK#A:07422	-1.399906	4.05019E- 05	3.91276E -05	-4.065883	2197	20714	13781.5	10
pre-tnk cell associated protein 1f6 3' end		L17326	mwghuman3 OK#B:9025	-1.643879	5.92984E- 08	3.84322E -06	-5.055927	2201	6449.5	4787.5	
hepcidin antimicrobial peptide (HAMP), mRNA	NP_066998.1	NM_021175.2	mwghuman3 OK#A:06397	-1.279742	2.53831E- 05	1.72268E -05	-4.893297	2205. 5	3722.5	3385.25	0
ensembl genscan prediction		AC078819.13. 1.41283.1	mwghuman3 OK#C:7792	-1.349603	2.94705E- 06	7.88194E -05	-4.262185	2213	21381.5	17800.75	
hypothetical protein BC009862 (LOC90113), mRNA	XP_291077.3	XM_291077.3	mwghuman3 OK#B:3668	-1.769275	0.0003405 69	0.000454 027	-4.413577	2221. 5	6261.5	5176	0
elongation factor, RNA polymerase II, 2 (ELL2), mRNA	NP_036213.1	NM_012081.3	mwghuman3 OK#A:00356	-1.499848	5.40285E- 05	0.000157 701	-4.384409	2223. 5	14138	11702.5	4

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
FGFR1 oncogene partner (FGFR1OP), transcript variant 1, mRNA	NP_008976.1	NM_007045.2	mwghuman3 OK#B:4675	-1.513357	9.11409E- 05	0.000233 537	-4.085108	2228. 5	19894	19145.25	0
ensembl gensecan prediction		AC025953.2.1 16948.127472 .1	mwghuman3 OK#C:6647	-2.043219	0.0001551 45	0.000283 207	-3.955032	2231	21041	17429.5	
EH domain binding protein 1 (EHBP1), mRNA	NP_056067.1	NM_015252.2	mwghuman3 OK#B:0385	-1.35833	2.50342E- 06	6.99321E- 05	-4.628679	2249. 5	13151.5	12131	5
propionyl Coenzyme A carboxylase, alpha polypeptide (PCCA), mRNA	NP_000273.2	NM_000282.2	mwghuman3 OK#B:3551	-1.505038	6.411E-05	0.000110 999	-4.042034	2251	16323	13459	5
ensembl gensecan prediction		AL138499.4.1 185713.1	mwghuman3 OK#C:4137	-1.655664	1.65577E- 05	8.59969E- 05	-3.700791	2252. 5	6728	6542.5	
ensembl gensecan prediction		AC025937.3.2 8407.38498.1	mwghuman3 OK#C:9420	-5.821331	1.29566E- 11	3.14688E- 07	-6.568115	2255. 5	3524	1068.5	

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
myocilin, trabecular meshwork inducible glucocorticoid response (MYOC), mRNA	NP_000252.1	NM_000261.1	mwghuman3 OK#A:09642	-1.364785	4.61814E- 05	2.61402E- 05	-4.638227	2263	23815.5	22357.25	0
hspc074		AF161337	mwghuman3 OK#B:1281	-1.61806	1.54965E- 06	1.54035E- 05	-4.426706	2264. 5	1792	1727	3
epoxide hydrolase 2, cytoplasmic (EPHX2), mRNA	NP_001970.2	NM_001979.4	mwghuman3 OK#A:08300	-1.416398	5.8666E- 06	5.81228E- 06	-4.695716	2267. 5	19752.5	16857	3
centromere protein C 1 (CENPC1), mRNA	NP_001803.2	NM_001812.2	mwghuman3 OK#A:10535	-1.578112	0.0001833 56	0.000192 131	-4.258306	2275	19346.5	14107.25	4
poly(A) polymerase beta (testis specific) (PAPOLB), mRNA	NP_064529.4	NM_020144.4	mwghuman3 OK#A:00034	-1.533242	0.0001793 94	0.000311 603	-4.111646	2284	24777	23772.75	1
oligonucleotide /oligosaccharid e-binding fold containing 1 (OBF1), mRNA	NP_079204.1	NM_024928.3	mwghuman3 OK#A:07366	-1.597262	0.0001519 06	0.000150 05	-4.339099	2292	15940.5	11655	4

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
tripartite motif- containing 10 (TRIM10), transcript variant 1, mRNA	NP_006769.1	NM_006778.2	mwghuman3 OK#A:10515	-1.750912	5.52205E- 05	0.000135 784	-4.621742	2296. 5	4089.5	1565.5	0
Rap2-binding protein 9 (RPIB9), mRNA	NP_612147.1	NM_138290.1	mwghuman3 OK#B:7696	-1.451227	1.03873E- 06	1.37651E -05	-5.068475	2297	24136.5	22036.5	1
fksg17		NM_032031	mwghuman3 OK#B:1656	-1.576144	0.0001418 34	0.000233 537	-4.037961	2320. 5	2050	1701.75	1
G protein- coupled receptor 83 (GPR83), mRNA	NP_057624.2	NM_016540.2	mwghuman3 OK#A:05359	-1.472466	6.54909E- 05	0.000182 916	-3.811779	2322. 5	18971.5	15879.25	0
ensembl genscan prediction		AC078987.9.1 35718.144151 .1	mwghuman3 OK#C:4632	-1.300374	2.50018E- 05	1.72268E -05	-4.918105	2322. 5	25018.5	21332.5	
LIM homeobox 9 (LHX9), transcript variant 1, mRNA	NP_064589.2	NM_020204.2	mwghuman3 OK#B:8634	-1.374971	4.6951E- 06	9.24336E -06	-5.312469	2333. 5	16158	13872.25	0
pellino homolog 1 (Drosophila) (PELI1), mRNA	NP_065702.2	NM_020651.2	mwghuman3 OK#A:10770	-1.492094	8.8328E- 06	8.23838E -06	-5.23835	2336	22421.5	17524.5	7

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
hypothetical LOC401500 (LOC401500), mRNA	XP_379629.1	XM_379629.1	mwghuman3 OK#B:6223	-1.325858	2.27785E- 05	4.12788E- 05	-4.402696	2336. 5	26315	25320.25	0
TSC22 domain family, member 3 (TSC22D3), transcript variant 2, mRNA	NP_004080.2	NIM_004089.3	mwghuman3 OK#B:0462	-1.491298	5.41371E- 05	1.72268E- 05	-5.010311	2350. 5	18693.5	13200.5	43
G protein- coupled receptor 51 (GPR51), mRNA	NP_005449.5	NIM_005458.5	mwghuman3 OK#A:04815	-1.389185	0.0001017 06	2.98753E- 05	-4.845168	2361	3420	2489.25	0
chromosome 10 open reading frame 61 (C10orf61), transcript variant 2, mRNA	NP_056446.1	NIM_015631.2	mwghuman3 OK#B:3105	-1.555923	0.0001770 95	0.000297 088	-4.510054	2366. 5	10134	8091.5	3.
Jumonji domain containing 2C (JMJD2C), mRNA	NP_055876.1	NIM_015081.1	mwghuman3 OK#B:8433	-1.317474	6.41124E- 05	0.000142 749	-4.870495	2366. 5	24516.5	22272.75	11
zinc finger protein 547 (ZNF547), mRNA	NP_775902.2	NIM_173631.2	mwghuman3 OK#B:6716	-1.63256	0.0002511 74	0.000257 25	-3.984452	2370	19484	19537	2

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
hypothetical protein FLJ20032 (FLJ20032), mRNA	NP_060098.2	NM_017628.2	mwghuman3 OK#B:2068	-1.74414	6.61052E- 05	0.000105 506	-4.166213	2374	15233.5	9767.75	16
ensembl gencode prediction		AC064877.3.1 21131.166993 .1	mwghuman3 OK#C:7466	-1.319284	4.28953E- 05	2.03519E- 05	-4.802131	2374	27348	26740.25	
ensembl gencode prediction		AC027755.2.8 1287.97090.1	mwghuman3 OK#C:3411	-1.439071	0.0001259 01	0.000331 474	-4.145868	2378. 5	14385.5	10781.5	
KIAA0690 (KIAA0690), mRNA	NP_055994.1	NM_015179.2	mwghuman3 OK#B:7202	-1.642414	0.0001739 36	0.000433 377	-4.08872	2380	14459	11844.25	10
SH3 domain binding glutamic acid- rich protein like 2 (SH3BGR2), mRNA	NP_113657.1	NM_031469.1	mwghuman3 OK#B:1794	-1.995457	0.0002796 76	0.000376 568	-4.033794	2381	9893.5	6985.75	3
cdna: f1j21394 fis clone col03536 unnamed protein product		AK025047	mwghuman3 OK#B:2580	-2.258109	0.0004473 76	0.000359 234	-4.071961	2387. 5	17288	11926.75	0
hypothetical protein xp_039231 loc91565		XM_039231	mwghuman3 OK#B:6431	-1.337232	2.70835E- 05	0.000174 117	-4.141157	2398	24099.5	20885	

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
GPI anchored molecule like protein (GML), mRNA	NP_002057.1	NM_002066.1	mwghuman3 OK#A:02108	-1.438045	0.0000724 93	0.000129 14	-4.162956	2405	16818	14265.75	0
small nuclear RNA activating complex, polypeptide 5, 19kDa (SNAPC5), mRNA	NP_006040.1	NM_006049.1	mwghuman3 OK#B:0945	-1.323754	1.74702E- 05	0.000184 787	-4.006319	2444	17556.5	17969.25	6
ensembl genscan prediction		AC027689.10. 1.180573.5	mwghuman3 OK#C:9758	-1.644263	0.0002550 65	2.98753E -05	-3.674603	2451	16829.5	10684.25	
mitochondrial tumor suppressor 1 (MTUS1), nuclear gene encoding mitochondrial protein, transcript variant 1, mRNA	NP_0010019 24.1	NM_0010019 24.1	mwghuman3 OK#B:7775	-1.715161	0.0003036 63	0.000269 936	-4.435392	2461. 5	17489	15873	0
ensembl genscan prediction		AL049829.4.1 .196292.3	mwghuman3 OK#C:4548	-1.402914	1.70061E- 06	2.49927E -06	-5.01844	2471	28131	26784	
ensembl genscan prediction		AC084842.1.7 903.10639.1	mwghuman3 OK#C:7638	-1.400793	0.0008120 94	7.36585E -05	-5.107784	2475. 5	14235.5	11061.25	

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
SAFB-like, transcription modulator (SLTM), transcript variant 1, mRNA	NP_079031.2	NM_024755.2	mwghuman3 OK#B:2154	-1.309539	2.00445E- 05	0.000122 803	-4.680439	2477. 5	12490	12280	12
guanine nucleotide binding protein (G protein), alpha activating activity polypeptide, olfactory type (GNAL), transcript variant 2, mRNA	NP_002062.1	NM_002071.1	mwghuman3 OK#A:06286	-1.836112	0.0003002 6	0.000498 109	-4.10637	2478	19959	16690.75	0
similar to cg14182 product loc146175		XM_085352	mwghuman3 OK#B:7365	-1.746066	0.0001949 23	0.000433 377	-3.812815	2487	14791.5	9814.5	
PH domain and leucine rich repeat protein phosphatase (PHLPP), mRNA	NP_919431.1	NM_194449.1	mwghuman3 OK#B:2242	-2.043619	0.0003079 45	0.000498 109	-4.006924	2500	15125	10009.75	7

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
autism susceptibility candidate 2 (AUTS2), mRNA	NP_056385.1	NM_015570.1	mwghuman3 OK#B:0110	-1.807633	0.0003692 99	0.000382 814	-4.213775	2503	18404	14412.75	8
hypothetical protein xp_097338 loc147909		XM_097338	mwghuman3 OK#B:5652	-1.428873	1.32234E- 06	2.67916E -05	-4.387947	2513	4388	2991.75	
leucine-rich repeat- containing G protein-coupled receptor 4 (LGR4), mRNA	NP_060960.1	NM_018490.1	mwghuman3 OK#A:06106	-1.519205	7.81416E- 05	0.000122 803	-3.810559	2514. 5	21417.5	19684	2
ensembl prediction		ENSG0000001 13407	mwghuman3 OK#C:2560	-1.740805	1.93346E- 05	9.52811E -05	-4.388894	2525	8797.5	6359.5	
programmed cell death 1 (PDCD1), mRNA	NP_005009.1	NM_005018.1	mwghuman3 OK#B:9147	-1.519488	1.50412E- 06	3.41028E -06	-5.713059	2537	8575	7118.5	0
cadherin 20, type 2 (CDH20), mRNA	NP_114097.2	NM_031891.2	mwghuman3 OK#B:7584	-1.393019	1.91884E- 05	2.73302E -05	-4.362445	2538	15588	12275.75	0

Fig. 3 (continued)

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Gene name/ symbol	protein accession	mRNA ref seq accession	MWG Probe name	median fold change	t-test	Wilcoxon test	SAM	rank score	tumour tissue median intensity rank	non- malignant tissue median intensity rank	blood
glycine dehydrogenas e (decarboxylatin g; glycine decarboxylase, glycine cleavage system protein P) (GLDC), mRNA	NP_000161.1	NM_000170.1	mwghuman3 OK#B:8959	-1.405054	9.33312E- 05	0.000116 76	-4.398207	2542. 5	6039	4550.5	1
protease, serine, 35 (PRSS35), mRNA	NP_699193.1	NM_153362.1	mwghuman3 OK#B:3364	-1.451818	0.0002370 39	0.000257 25	-4.319803	2545	16909	14109	0
ensembl genscan prediction ATP-binding cassette, sub- family A (ABC1), member 12 (ABCA12), transcript variant 1, mRNA		AC008134.3.1 .175132.1	mwghuman3 OK#C:3643	-1.601839	0.0003788 4	0.000286 633	-4.042534	2545	27071.5	25825	
	NP_775099.2	NM_173076.2	mwghuman3 OK#B:3505	-1.653773	0.0002371 78	0.000475 592	-3.927921	2561. 5	19931	18593.5	0
suppressor of hairy wing homolog 3 (Drosophila) (SUHW3), mRNA	NP_060136.1	NM_017666.2	mwghuman3 OK#B:2904	-1.678106	0.0001863 59	0.000546 156	-3.864729	2568	17527	15364.5	1

Fig. 3 (continued)

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Gene name/symbol	protein accession	mRNA ref seq accession	median fold change	rank score	tumour tissue median intensity rank	non-malignant tissue median intensity rank	blood EST number
hypothetical protein FLJ21511 (FLJ21511), mRNA	NP_079363.1	NM_025087.1	-2.080908	68	14455	9272.5	0
paired box gene 8 (PAX8), transcript variant PAX8A, mRNA	NP_003457.1	NM_003466.3	-1.961896	82	19419	12999.5	0
UPF3 regulator of nonsense transcripts homolog A (yeast) (UPF3A), transcript variant 1, mRNA	NP_075387.1	NM_023011.2	-3.84007	96.5	5663.5	1825	0
leukotriene B4 12-hydroxydehydrogenase (LTB4DH), mRNA	NP_036344.1	NM_012212.2	-5.034613	122.5	11340.5	3138	0
RAB11 family interacting protein 2 (class I) (RAB11FIP2), mRNA	NP_055719.1	NM_014904.1	-1.993629	156	19636.5	12951	0
TSC22 domain family, member 1 (TSC22D1), transcript variant 2, mRNA	NP_006013.1	NM_006022.2	-2.133065	156.5	8415	6130	1
sulfite oxidase (SUOX), nuclear gene encoding mitochondrial protein, transcript variant 1, mRNA	NP_000447.2	NM_000456.2	-1.622803	223	11312.5	8789.5	0
tetratricopeptide repeat domain 21A (TTC21A), mRNA	NP_665698.1	NM_145755.1	-2.976809	225	8375.5	3870.5	1
synaptotagmin-like 2 (SYTL2), transcript variant b, mRNA	NP_115755.2	NM_032379.3	-2.343357	342	19920	12053.5	0
wingless-type MMTV integration site family, member 2B (WNT2B), transcript variant WNT-2B1, mRNA	NP_004176.2	NM_004185.2	-10.745275	501	10716	2016.25	0
protocadherin gamma subfamily A, 12 (PCDHGA12), transcript variant 1, mRNA	NP_003726.1	NM_003735.2	-2.070447	511	2537	1931.5	0
olfactory receptor, family 1, subfamily D, member 5 (OR1D5), mRNA	NP_055381.1	NM_014566.1	-1.640751	539.5	1644	1134	0
G protein-coupled receptor 126 (GPR126), transcript variant b1, mRNA	NP_940971.1	NM_198569.1	-2.181735	549	15965.5	8040.75	0
ubiquitin specific peptidase 9, Y-linked (fat facets-like, Drosophila) (USP9Y), mRNA	NP_004645.2	NM_004654.3	-1.584065	587	10035.5	7858.25	1

Fig. 4

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Gene name/symbol	protein accession	mRNA ref seq accession	median fold change	rank score	tumour issue median intensity rank	non-malignant tissue median intensity rank	blood EST number
chromosome 11 open reading frame 1 (C1orf1), mRNA	NP_073598.1	NM_022761.1	-1.81726	673.5	12025.5	9585.25	0
BCL2-associated athanogene (BAG1), mRNA	NP_004314.3	NM_004323.3	-2.525417	776	9031	4503.5	1
family with sequence similarity 44, member B (FAM44B), mRNA	NP_612378.1	NM_138369.1	-1.357114	942.5	15308.5	13004.75	1
fibroblast growth factor receptor 4 (FGFR4), transcript variant 2, mRNA	NP_075252.2	NM_022963.2	-2.638426	1087.5	17096	9762.5	0
thyroid transcription factor 1 (TTF1), mRNA	NP_003308.1	NM_003317.3	-1.466987	1124.5	2139	1026.25	0
VprBP protein (VprBP), mRNA	NP_055518.1	NM_014703.1	-1.720326	1178	17312.5	14031	0
empty spiracles homolog 2 (Drosophila) (EMX2), mRNA	NP_004089.1	NM_004098.2	-1.745086	1199.5	19380	10749.25	0
homeo box D8 (HOXD8), mRNA	NP_062458.1	NM_019558.2	-1.41555	1206	9672.5	7512.25	0
zinc finger protein 626 (ZNF626), mRNA	NP_660340.1	NM_145297.2	-1.773183	1266	14806.5	10341	1
ring finger protein 44 (RNF44), mRNA	NP_055716.1	NM_014901.4	-1.353366	1292	6288.5	4664.5	1
pyrimidinergic receptor P2Y, G-protein coupled, 4 (P2RY4), mRNA	NP_002556.1	NM_002565.3	-1.732075	1309	18307	12139.5	0
similar to hypothetical protein (LOC440804), mRNA	XP_036936.3	XM_036936.3	-4.049648	1332	3647	996.5	0
chromosome 20 open reading frame 152 (C20orf152), mRNA	NP_543024.1	NM_080834.1	-1.948612	1349	10775	8652.5	0
folistatin-like 4 (FSTL4), mRNA	NP_055897.1	NM_015082.1	-1.544042	1405.5	17051	12319	0
chromosome 14 open reading frame 168 (C14orf168), mRNA	NP_113615.1	NM_031427.1	-1.512002	1414	15738	14705.75	1
kallikrein 8 (neuropsin/ovasin) (KLK8), transcript variant 2, mRNA	NP_653088.1	NM_144505.1	-2.091505	1449.5	8391	6488	0
leucine zipper, down-regulated in cancer 1-like (LDOC1L), mRNA	NP_115663.2	NM_032287.2	-1.501021	1454.5	16509.5	14157	0
hypothetical protein MGC11242 (MGC11242), mRNA	NP_077296.1	NM_024320.2	-1.527839	1463.5	17565	13134.5	0
KIAA1274 (KIAA1274), mRNA	NP_055246.1	NM_014431.1	-1.41942	1488.5	8059	5065	0
hypothetical LOC401510 (LOC401510), mRNA	XP_376843.2	XM_376843.2	-1.402922	1504	13882.5	11233.25	0

Fig. 4 (continued)

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Gene name/symbol	protein accession	mRNA ref seq accession	median fold change	rank score	tumour tissue median intensity rank	non-malignant tissue median intensity rank	blood EST number
platin 1 (l isoform) (PLS1), mRNA	NP_002661.1	NM_002670.1	-1.626206	1509.5	20943	14040.5	1
zinc finger, DHHC-type containing 2 (ZDHHC2), mRNA	NP_057437.1	NM_016353.2	-1.588633	1536	13684.5	10087.5	0
cone-rod homeobox (CRX), mRNA	NP_000545.1	NM_000554.2	-3.022299	1548	16588.5	7500.5	0
PHD finger protein 23 (PHF23), mRNA	NP_077273.1	NM_024297.1	-1.398461	1657.5	10656.5	9355.75	0
nasopharyngeal carcinoma associated gene protein-8 (NAG8), mRNA	NP_055226.1	NM_014411.2	-1.388055	1660	15731.5	12161	0
HERV-H LTR-associating 3 (HHLA3), transcript variant 3, mRNA	NP_001031722.1	NM_001036645.1	-2.043346	1759	13925.5	11798	0
fibronectin leucine rich transmembrane protein 3 (FLRT3), transcript variant 1, mRNA	NP_037413.1	NM_013281.2	-4.204569	1770	18156	9231.25	0
cell division cycle associated 7 (CDCA7), transcript variant 1, mRNA	NP_114148.2	NM_031942.3	-1.959598	1788	14826	12577.25	1
pyruvate dehydrogenase kinase, isozyme 4 (PDK4), mRNA	NP_002603.1	NM_002612.2	-1.735687	1911.5	18067	13997.25	1
leucine rich repeat and sterile alpha motif containing 1 (LRSAM1), transcript variant 1, mRNA	NP_612370.3	NM_138361.3	-2.034574	1959.5	7671.5	4421.75	1
guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 1 (GNAI1), mRNA	NP_002060.4	NM_002069.4	-1.631361	2003	16803.5	14082	1
cerebral endothelial cell adhesion molecule 1 (CEECAM1), mRNA	NP_057258.2	NM_016174.3	-1.516413	2014	16662.5	13757.75	0
hypothetical protein FLJ22965 (FLJ22965), mRNA	NP_071384.1	NM_022101.2	-1.903469	2041.5	2596	2337	0
chromosome 9 open reading frame 102 (C9orf102), transcript variant 1, mRNA	NP_064592.1	NM_020207.2	-1.369819	2049	16457.5	13970	0
pleckstrin and Sec7 domain containing 3 (PSD3), transcript variant 1, mRNA	NP_056125.2	NM_015310.2	-1.395381	2072	14023	13223.25	1
zinc finger, FYVE domain containing 21 (ZFVYE21), mRNA	NP_076976.1	NM_024071.2	-1.579562	2094	2994.5	2740.25	0
forkhead box E1 (thyroid transcription factor 2) (FOXE1), mRNA	NP_004464.2	NM_004473.3	-1.678652	2107	7269	5293.75	0

Fig. 4 (continued)

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Gene name/symbol	protein accession	mRNA ref seq accession	median fold change	rank score	tumour tissue median intensity rank	non-malignant tissue median intensity rank	blood EST number
Myc-induced mitochondria protein (mimifin), mRNA	NP_777549.1	NM_174889.2	-1.474873	2151.5	9215	7030.25	1
similar to developmental pluripotency associated 5; embryonal stem cell specific gene 1 (LOC341912), mRNA	XP_292301.3	XM_292301.3	-1.639786	2155	18581.5	12815.25	1
hepcidin antimicrobial peptide (HAMP), mRNA	NP_066998.1	NM_021175.2	-1.279742	2205.5	3722.5	3385.25	0
hypothetical protein BC009862 (LOC90113), mRNA	XP_291077.3	XM_291077.3	-1.769275	2221.5	6261.5	5176	0
tripartite motif-containing 10 (TRIM10), transcript variant 1, mRNA	NP_006769.1	NM_006778.2	-1.750912	2296.5	4089.5	1565.5	0
fksg17 fksg17		NM_032031	-1.576144	2320.5	2050	1701.75	1
LIM homeobox 9 (LHX9), transcript variant 1, mRNA	NP_064589.2	NM_020204.2	-1.374971	2333.5	16158	13872.25	0
G protein-coupled receptor 51 (GPR51), mRNA	NP_005449.5	NM_005458.5	-1.389185	2361	3420	2489.25	0
cdna: flj21394 fis clone col03536 unnamed protein product		AK025047	-2.258109	2387.5	17288	11926.75	0
GPI anchored molecule like protein (GML), mRNA	NP_002057.1	NM_002066.1	-1.438045	2405	16818	14265.75	0
programmed cell death 1 (PDCD1), mRNA	NP_005009.1	NM_005018.1	-1.519488	2537	8575	7118.5	0
cadherin 20, type 2 (CDH20), mRNA	NP_114097.2	NM_031891.2	-1.393019	2538	15588	12275.75	0
glycine dehydrogenase (decarboxylating; glycine decarboxylase, glycine cleavage system protein P) (GLDC), mRNA	NP_000161.1	NM_000170.1	-1.405054	2542.5	6039	4550.5	1
protease, serine, 35 (PRSS35), mRNA	NP_699193.1	NM_153362.1	-1.451818	2545	16909	14109	0

Fig. 4 (continued)

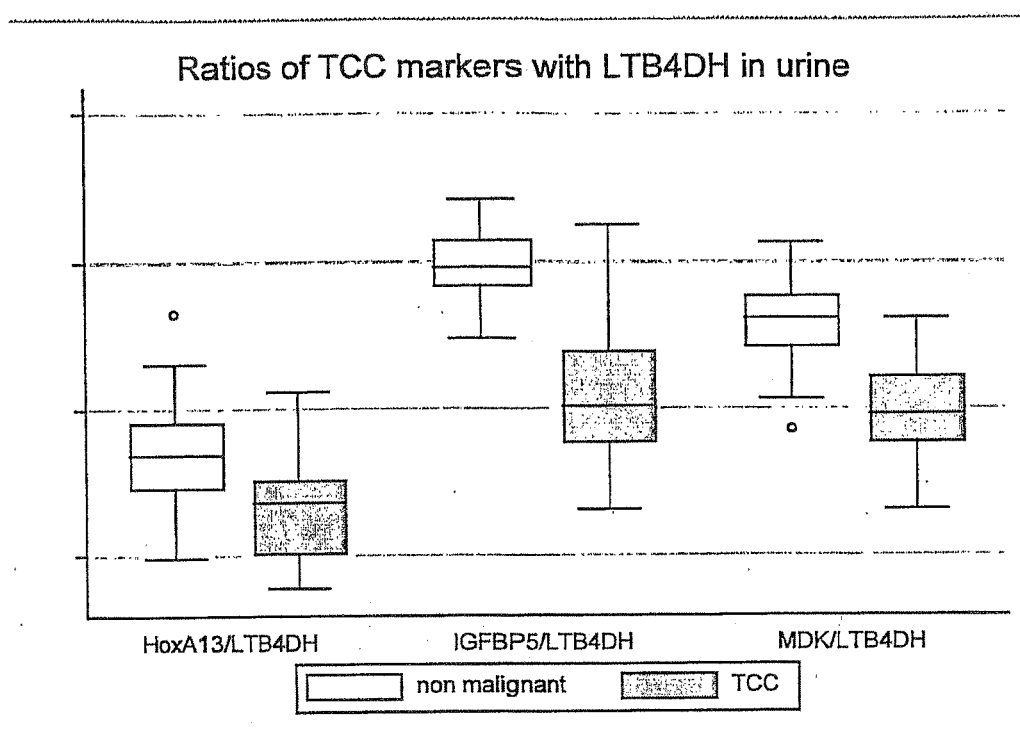


Fig. 5

a.

ratio	sensitivity (%)	specificity (%)
MDK/LTB4DH	87	81
IGFBP5/LTB4DH	87	88
HoxA13/LTB4DH	65	81

b.

combination test	sensitivity (%)	specificity (%)
MDK/LTB4DH and IGFBP5/LTB4DH	92	98
MDK/LTB4DH and HoxA13/LTB4DH	88	86
IGFBP5/LTB4DH and HoxA13/LTB4DH	83	98

Fig. 6

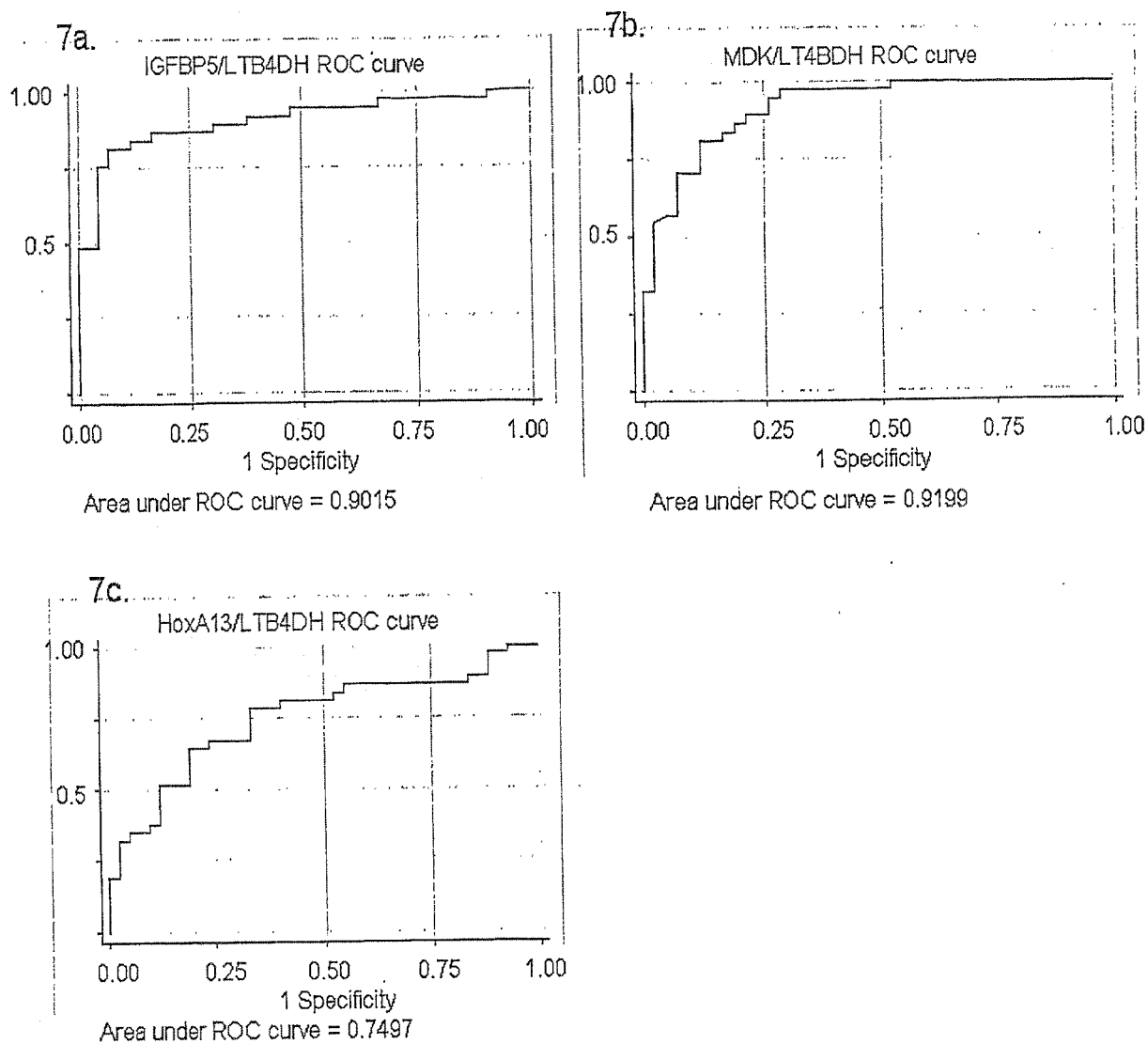


Figure 7. ROC curves showing the sensitivity and specificity of detection of TCC in urine samples from TCC patients and non-malignant controls using ratios with LTB4DH.

7a. IGFBP5/LTB4DH; 7b. MDK/LT4BDH; 7c. HoxA13/LTB4DH.

Fig. 7

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**Fig. 8a: Combination test with MDK/LTB4DH and
IGFBP5/LTB4DH**

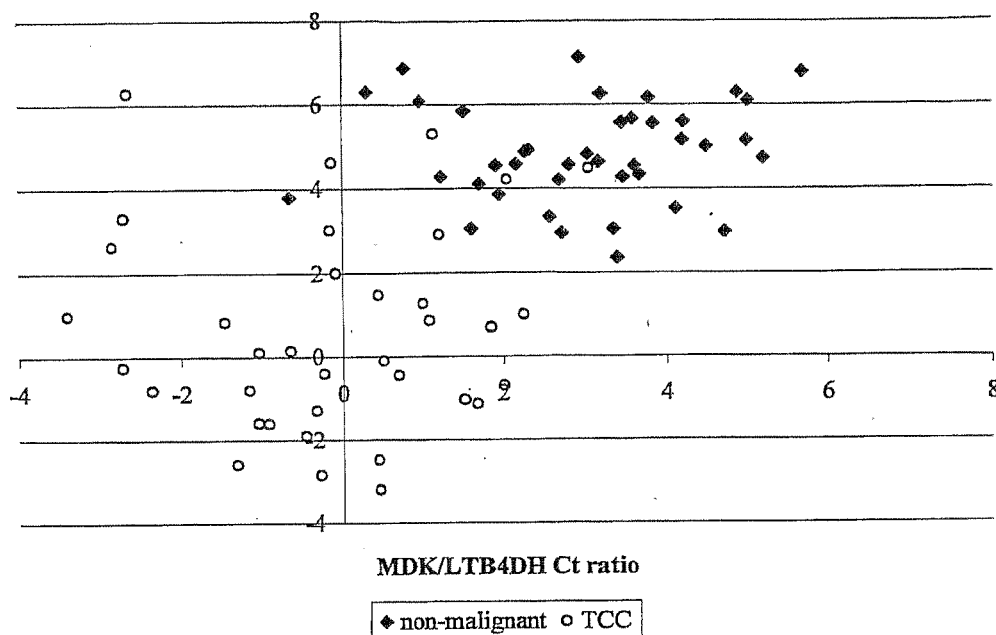
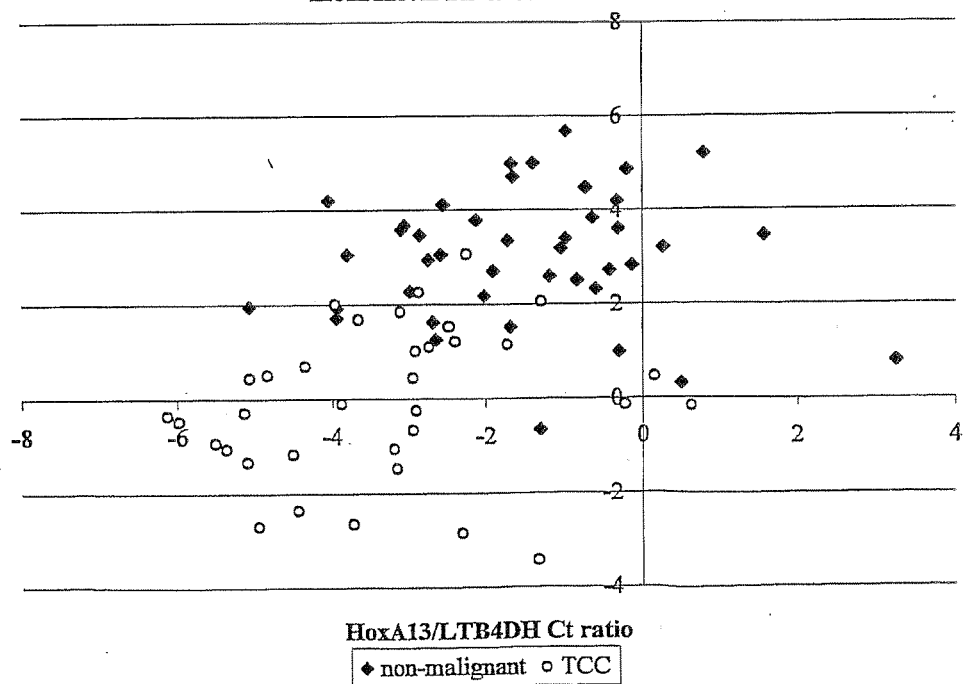
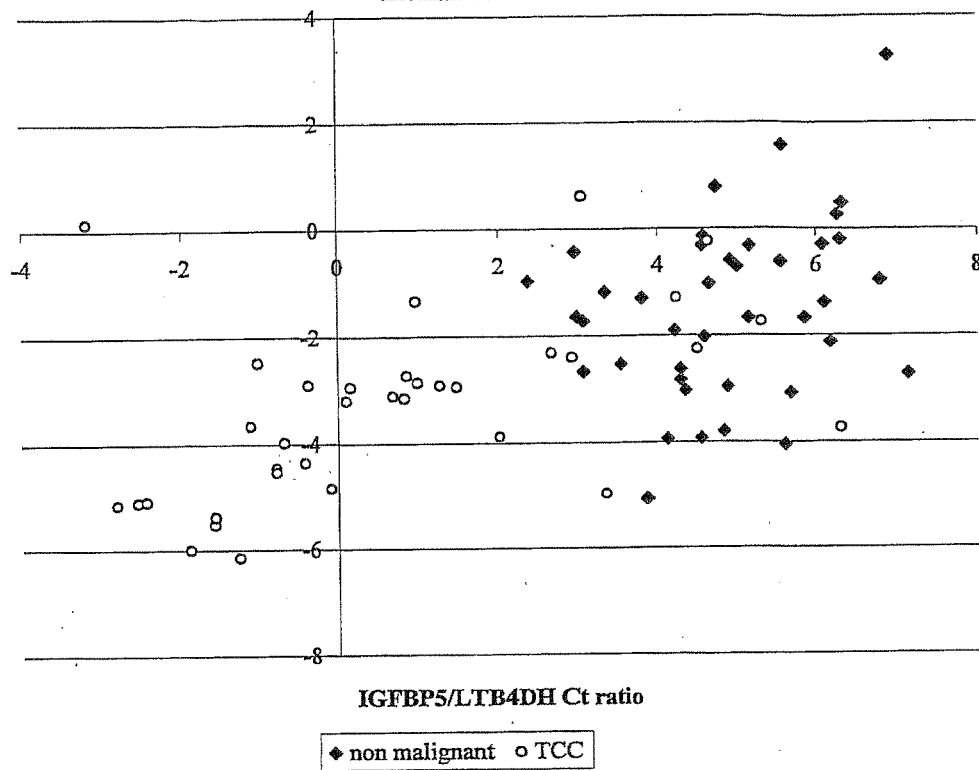
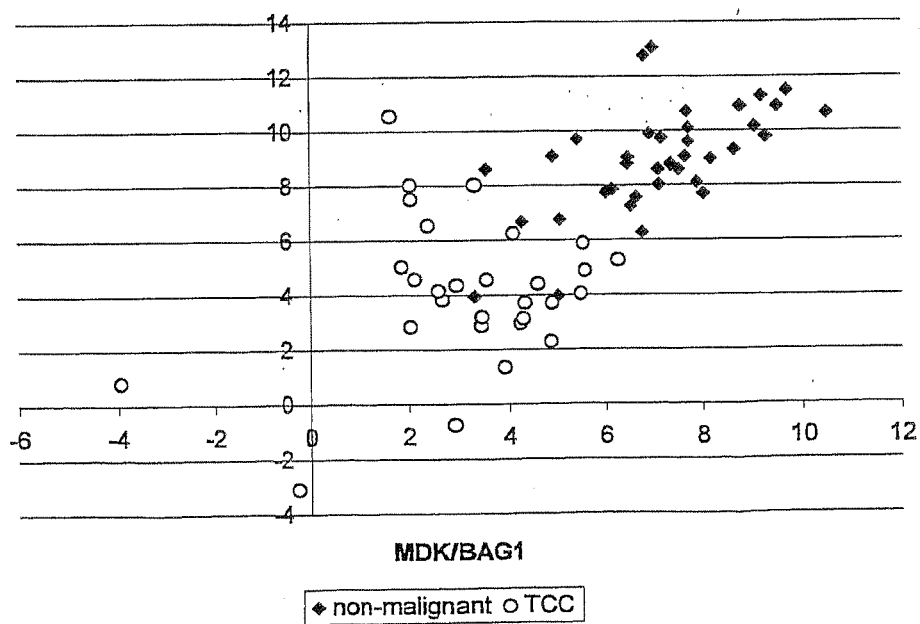


**Fig. 8b: Combination test with MDK/LTB4DH and
HoxA13/LTB4DH**



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Fig. 8c: Combination test with IGFBP5/LTB4DH and HoxA13/LTB4DH**Fig 8d: Combination Test with MDK/BAG1 and IGFBP5/BAG1**

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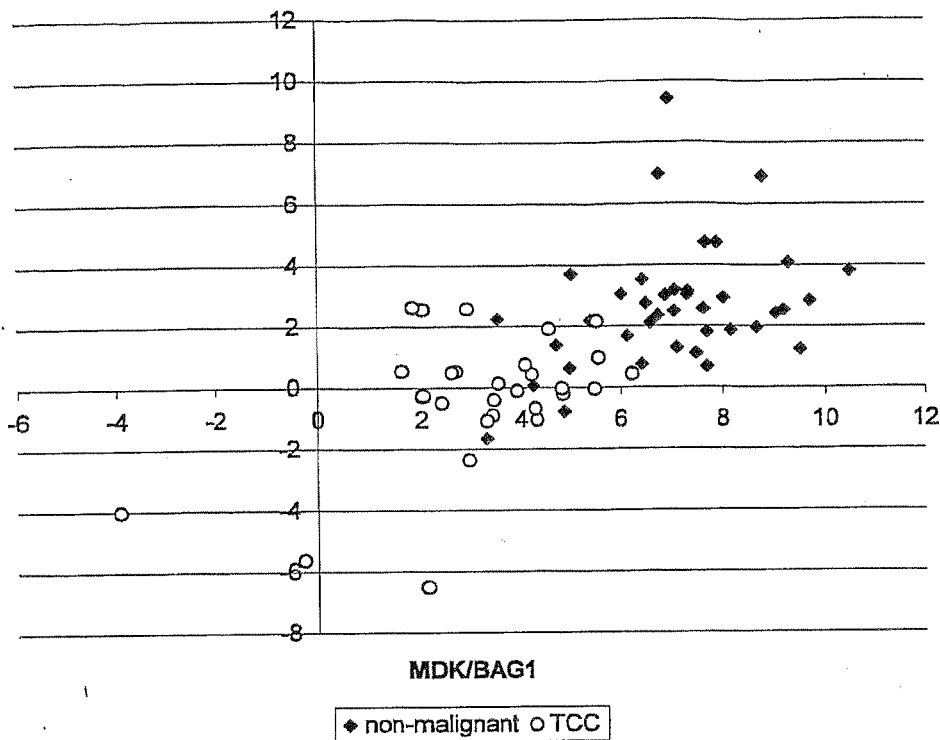
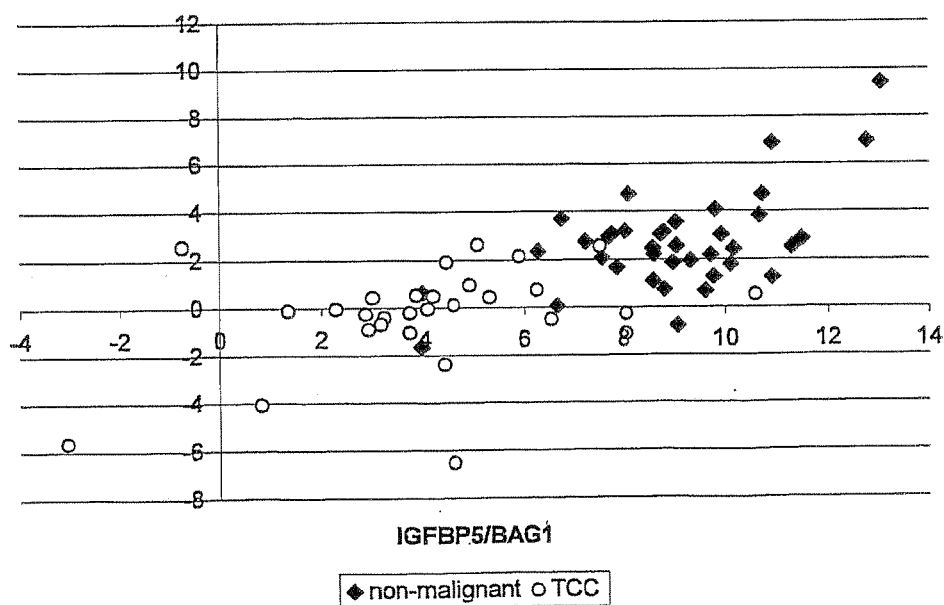
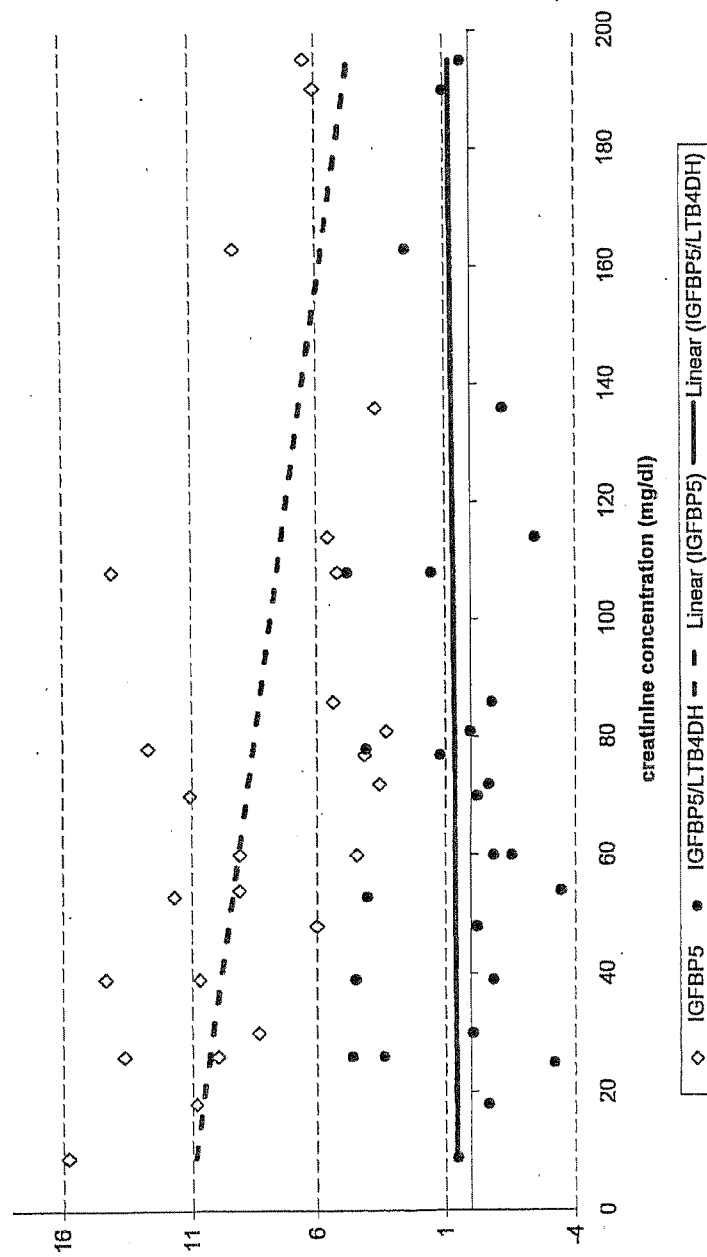
Fig. 8e: Combination test with MDK/BAG1 and HoxA13/BAG1**Fig. 8f: Combination test with IGFBP5/BAG1 and HoxA13/BAG1**

Figure 8. Scatter plots showing the use of test combinations to discriminate between urine samples from TCC patients and controls with non-malignant disease. 8a. MDK/LTB4DH and IGFBP5/LTB4DH; 8b. MDK/LTB4DH and HoxA13/LTB4DH; 8c. IGFBP5/LTB4DH and HoxA13/LTB4DH; 8d. MDK/BAG1 and IGFBP5/BAG1; 8e. MDK/BAG1 and HoxA13/BAG1; 8f. IGFBP5/BAG1 and HoxA13/BAG1.

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Fig. 9a: IGFBP5 and IGFBP5/LTB4DH vs creatinine concentration: TCC samples



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Fig.9b: IGFBP5 and IGFBP5/LTB4DH versus creatinine concentration: non-malignant samples

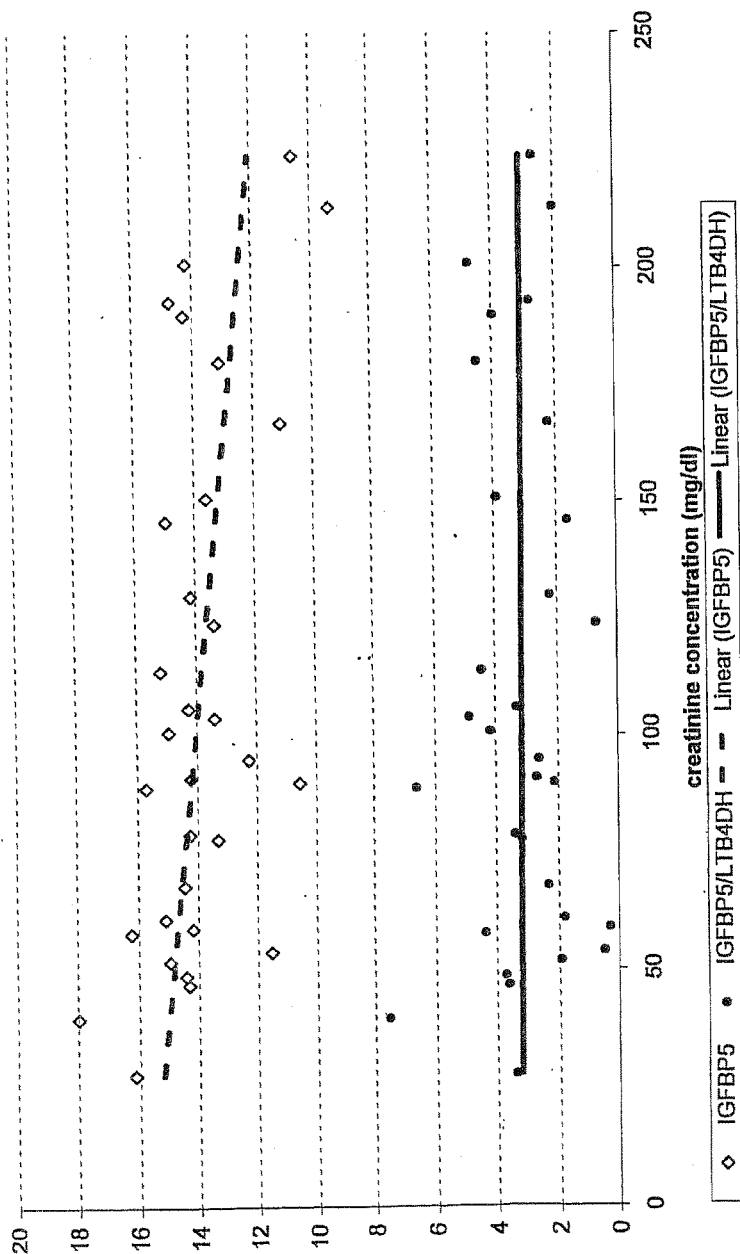


Figure 9. Scatter plots showing the correlation between ΔCt for IGFBP5 and ΔCt ratios for IGFBP5/LTB4DH and urine creatinine concentration.
9a. Urine samples from patients with TCC.
9b. Urine samples from patients with non-malignant disease.

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Fig. 10a: MDK - catheterised and voided samples

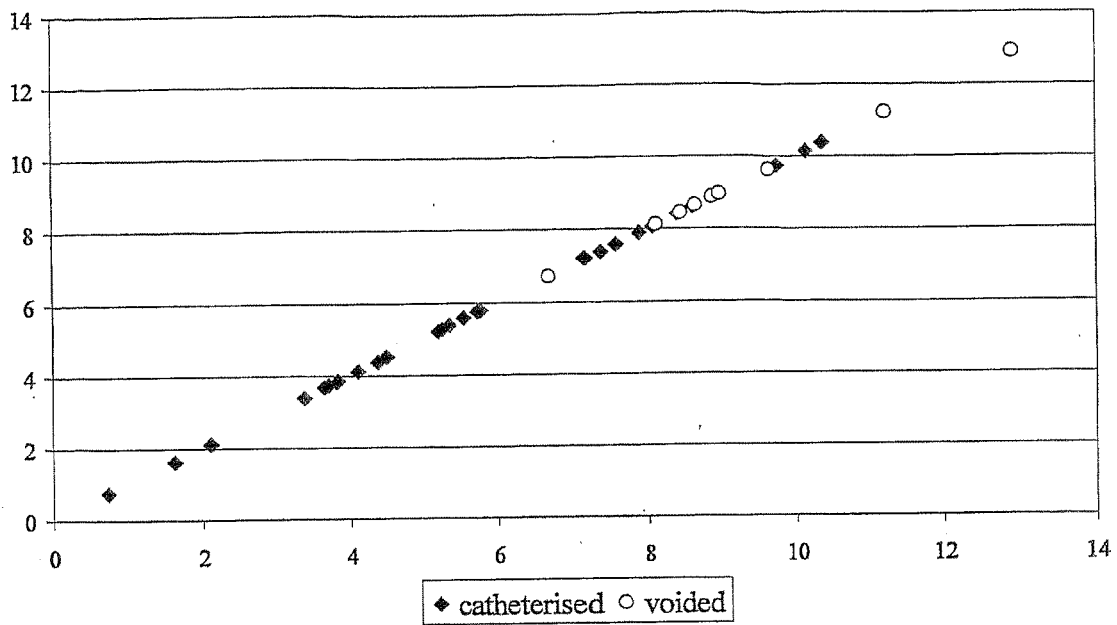
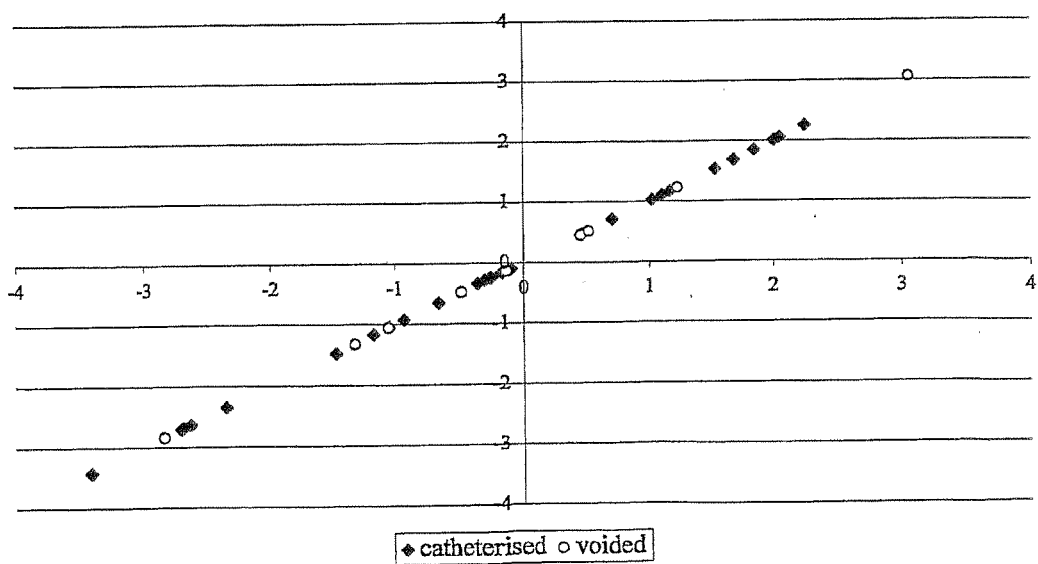


Fig. 10b: MDK/LTB4DH -catheterised and voided samples



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Fig. 10c: IGFBP5 - catheterised and voided samples

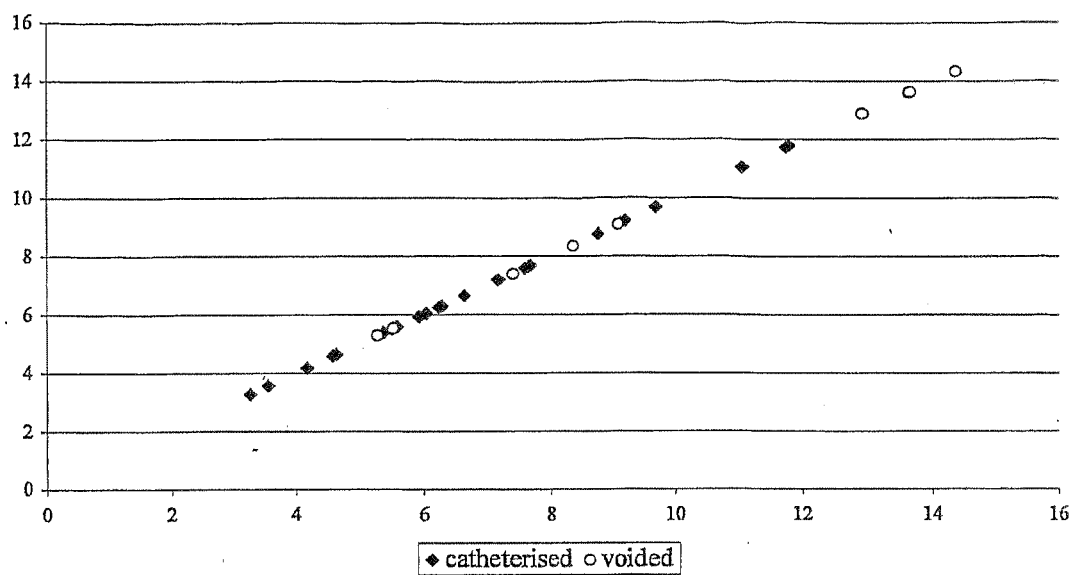
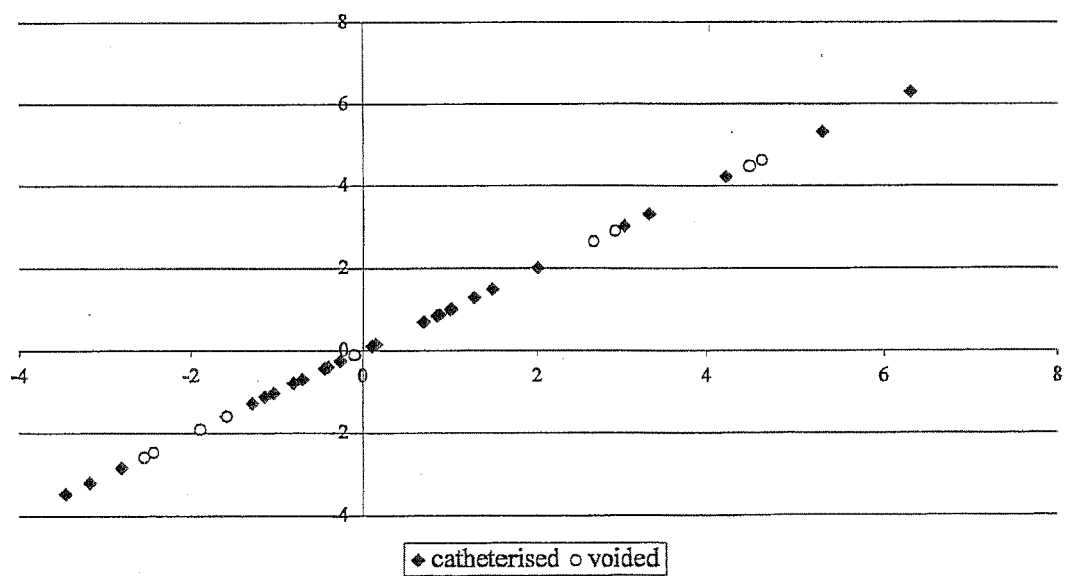


Fig. 10d: IGFBP5/LTB4DH -catheterised and voided samples



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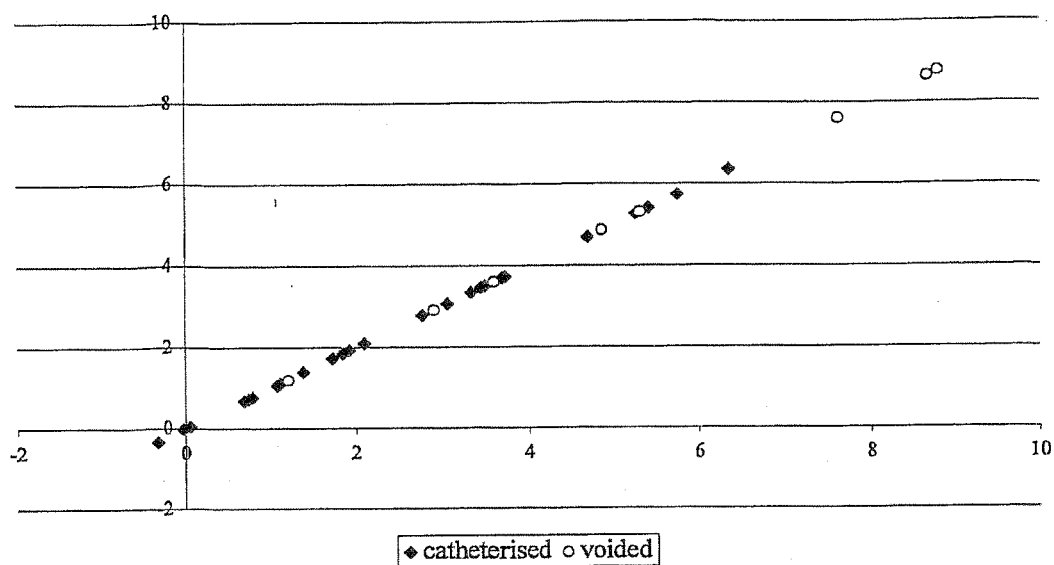
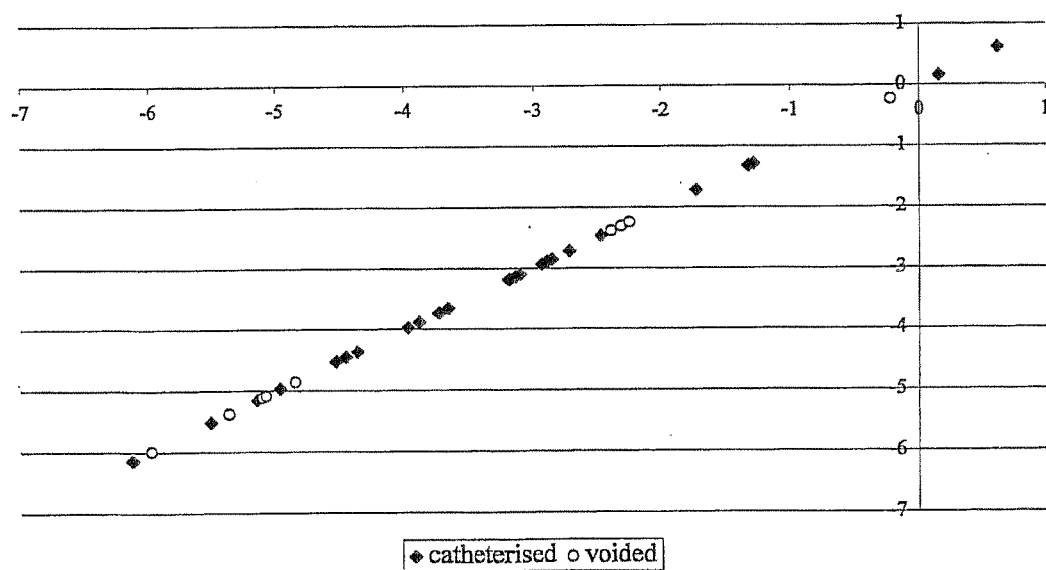
Fig. 10e: HoxA13 - catheterised and voided samples**Fig. 10f: HoxA13/LTB4DH -catheterised and voided samples**

Figure 10a. Self-self scatter plots showing the distribution of voided and catheterised samples from TCC patients analysed using BTMs alone and BTMs in ratios with LTB4DH. 10a. MDK; 10b. MDK/LTB4DH; 10c. IGFBP5; 10d. IGFBP5/LTB4DH; 10e. HoxA13; 10f. HoxA13/LTB4DH.

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
gamma-glutamyl hydrolase	GGH	mwghuman3 OK#A:03601	NM_003878.1	NP_003869.1	2.7	7.5	2.78E-08	3.63E-09	102	S
secreted phosphoprotein 1	SPP1	mwghuman3 OK#A:09441	NM_000582.2	NP_000573.1	5.1	28.6	3.04E-08	0.000000525	143.5	S
neurtin 1	NRN1	mwghuman3 OK#A:00658	NM_016588.2	NP_057672.1	3.9	54.8	1.93E-07	0.000000265	232	S
secreted protein, acidic, cysteine- rich (osteonectin)	SPARC	mwghuman3 OK#A:08092	NM_003118.2	NP_003109.1	2.5	6.9	2.9E-07	0.00000013	352.5	S
a disintegrin-like and metalloprotease (reprolysin type) with thrombospondin type 1 motif	ADAMTS10	mwghuman3 OK#B:1355	NM_030957.1	NP_112219.2	2.7	25.8	2.27E-06	0.000000856	465	S
contactin 1	CNTN1	mwghuman3 OK#A:01591	NM_175038.1	NP_778203.1	1.9	5.3	2.61E-06	0.00000196	805	S
tollid-like 2	TLL2	mwghuman3 OK#A:02932	NM_012465.2	NP_036597.1	3.9	35.6	0.0000207	0.0000466	1019	S
protein disulfide isomerase- related	PDIR	mwghuman3 OK#A:03506	NM_008810.1	NP_006801.1	1.6	3.3	0.0000228	0.00000785	1044.5	S
fibrillin 1	FBN1	mwghuman3 OK#A:07105	NM_000138.2	NP_000129.2	2.1	7.9	2.822E-06	1.37393E-06	1072.5	S
KIAA0100 gene product		mwghuman3 OK#A:10762	NM_014680.2	NP_055495.2	1.5	2.3	1.65E-06	0.00000187	1100.5	S
calreticulin	CALR	mwghuman3 OK#A:10360	NM_004343.2	NP_004334.1	1.7	3.4	5.39E-06	0.00000518	1123.5	S
integrin, beta-like 1	ITGBL1	mwghuman3 OK#A:07933	NM_004791.1	NP_004782.1	1.9	10.5	0.0000293	0.0000224	1186	S
elastase 3B, pancreatic	ELA3B	mwghuman3 OK#B:3993	NM_007352.1	NP_031378.1	1.4	2.1	1.65E-06	0.00000785	1239.5	S
SPARC related modular calcium binding 2	SMOC2	mwghuman3 OK#B:0260	NM_022138.1	NP_071421.1	1.6	4.3	0.0000069	0.00000547	1280	S

Fig. 11

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
hexosaminidase A (alpha polypeptide) insulin-like growth factor binding protein 7 microfibrillar- associated protein 2 cartilage intermediate layer protein, nucleotide pyrophosphohydr olase	HEXA	mwghuman3 OK#B:9777	NM_000520.2	NP_000511.1	1.9	14.6	0.0000183	0.0000325	1318.5	S
	IGFBP7	mwghuman3 OK#A:03385	NM_001553.1	NP_001544.1	2.0	6.5	0.0000614	0.000059	1554.5	S
	MFAP2	mwghuman3 OK#B:3055	NM_017459.1	NP_059453.1	1.6	4.9	0.0000388	0.0000466	1565.5	S
	CILP	mwghuman3 OK#A:00019	NM_003613.1	NP_003604.2	1.5	2.7	0.0000323	0.0000254	1582	S
	OLFM1	mwghuman3 OK#B:3555	NM_058199.2	NP_478106.1	2.3	20.7	0.0000508	0.0000254	1704	S
	LUM	mwghuman3 OK#A:09199	NM_002345.2	NP_002336.1	2.6	25.0	0.0002509	6.62502E-05	1953	S
	MDK	mwghuman3 OK#A:01650	NM_002391.2	NP_002382.1	1.8	8.9	0.0002901	5.24719E-05	2897	S
	SEM2	mwghuman3 OK#A:05073	NM_020163.1	NP_064548.1	1.4	2.2	7.236E-05	0.000116474	2920	S
	PRSS11	mwghuman3 OK#B:1274	NM_002775.2	NP_002766.1	1.5	5.4	0.0002849	9.32339E-05	3896.5	S
	SULF1	mwghuman3 OK#B:8770	NM_015170.1	NP_055985.1	3.2	60.9	0.0025727	0.000797894	4138.5	S
	SERPINH1	mwghuman3 OK#A:08615	NM_001235.2	NP_001226.2	1.5	2.7	5.232E-05	0.000221711	4391	S
	MGP	mwghuman3 OK#B:4003	NM_000900.2	NP_000891.2	2.6	47.9	0.0011611	0.001781907	5134	S

Fig. 11 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
tissue inhibitor of metalloproteinase 1	TIMP1	mwghuman3 OK#A:08048	NM_003254.1	NP_003245.1	1.8	4.4	0.0010783	0.006400169	7533	S
EGF-like-domain, multiple 6	EGFL6	mwghuman3 OK#A:07688	NM_015507.2	NP_056322.2	1.5	3.4	0.0042021	0.00857023	8467	S
sperm associated antigen 11	SPAG11	mwghuman3 OK#B:1373	NM_058203.1	NP_478110.1	1.3	4.2	0.0015737	0.001050446	10950	S
insulin-like growth factor binding protein 5	IGFBP5	mwghuman3 OK#C:1077	NM_000599.2	NP_000590.1	1.7	6.5	0.0097847	0.03366216	10980.5	S
sema domain, immunoglobulin domain (Ig), short basic domain, secreted,	SEMA3F	mwghuman3 OK#A:07262	NM_004186.2	NP_004177.2	-1.1	17.2	0.4328626	0.5041839	NA	S
(semaphorin) 3F cell division cycle 2, G1 to S and G2 to M	CDC2	mwghuman3 OK#A:05382	NM_033379.2	NP_203698.1	5.3	16.5	1.67E-12	6.12E-11	8	
topoisomerase (DNA) II alpha ubiquitin-	TOP2A	mwghuman3 OK#B:7144	NM_001067.2	NP_001058.2	3.6	7.5	5.33E-11	1.32E-09	28.5	
conjugating enzyme E2C	UBE2C	mwghuman3 OK#A:01776	NM_181803.1	NP_861519.1	4.6	34.3	6.82E-10	1.01E-09	29.5	
stathmin 1	STMN1	mwghuman3 OK#A:00925	NM_203401.1	NP_981946.1	3.2	11.4	7.66E-10	3.63E-09	44	
tubulin, alpha 4	TUBA4	mwghuman3 OK#B:2461	NM_025019.1	NP_079295.1	2.6	4.5	3.1E-09	1.32E-09	82.5	
histone 1, H1b high-mobility group box 2	HIST1H1B	mwghuman3 OK#A:05716	NM_005322.2	NP_005313.1	2.3	5.7	1.77E-11	4.42E-12	93	
HMGB2	HMGB2	mwghuman3 OK#B:3649	NM_002129.2	NP_002120.1	2.6	5.6	7.85E-09	1.44E-08	95.5	
cyclin A2 cell division cycle associated 1	CCNA2	mwghuman3 OK#A:04253	NM_001237.2	NP_001228.1	2.9	8.4	3.87E-08	5.85E-09	129.5	
CDCA1	CDCA1	mwghuman3 OK#B:9471	NM_145697.1	NP_663735.1	2.4	8.2	1.85E-09	5.85E-09	151.5	

Fig. 11 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
hypothetical protein MGC5576		mwghuman3 OK#A:06786	NM_024056.2	NP_076961.1	2.1	4.6	6.35E-09	9.25E-09	171	
DEK oncogene	DEK	mwghuman3 OK#B:2969	NM_003472.2	NP_003463.1	2.4	6.2	1.11E-07	1.44E-08	173.5	
MLF1 interacting protein	MLF1IP	mwghuman3 OK#C:8850	NM_024629.2	NP_078905.2	2.3	4.6	2.22E-07	6.07E-08	209.5	
cell division cycle associated 8	CDCA8	mwghuman3 OK#A:07906	NM_018101.1	NP_060571.1	2.3	4.1	2.8E-07	4.99E-08	212	
hypothetical protein FLJ20647		mwghuman3 OK#A:03566	NM_017918.3	NP_060388.1	2.2	4.6	1.5E-07	0.000000109	216	
thymidylate synthetase	TYMS	mwghuman3 OK#A:10045	NM_001071.1	NP_001062.1	2.2	5.0	1.48E-07	2.72E-08	232.5	
SMC4 structural maintenance of chromosomes 4- like 1 (yeast)	SMC4L1	mwghuman3 OK#A:05648	NM_0010027 99.1	NP_0010027 99.1	2.4	5.7	5.7E-07	0.000000525	264.5	
v-yes-1										
Yamaguchi sarcoma viral related oncogene homolog	LYN	mwghuman3 OK#C:2653	NM_002350.1	NP_002341.1	1.9	4.5	8.07E-08	0.000000265	267	
high-mobility group box 3	HMG3	mwghuman3 OK#A:01602	NM_005342.1	NP_005333.1	1.9	5.0	2.13E-10	6.12E-11	268	
prostaglandin I2 (prostacyclin) receptor	PTGIR	mwghuman3 OK#A:00268	NM_000960.3	NP_000951.1	3.2	31.5	3.59E-07	4.09E-08	270.5	
downstream neighbor of SON (DONSON)	DONSON	mwghuman3 OK#A:05883	NM_145795.1	NP_665738.1	1.8	3.3	2.74E-08	4.09E-08	279.5	
hyaluronan- mediated motility receptor	HMMR	mwghuman3 OK#A:02702	NM_012485.1	NP_036617.1	2.7	6.8	1.84E-06	0.000000729	291	
claudin 6	CLDN6	mwghuman3 OK#A:08357	NM_021195.3	NP_067018.1	3.2	39.1	7.89E-07	6.07E-08	296.5	
histone 1, H1d	HIST1H1D	mwghuman3 OK#C:1892	NM_005320.2	NP_005311.1	2.1	4.8	4.46E-08	7.37E-08	306.5	

Fig. 11 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
chromosome 10 open reading frame 3	C10orf3	mwghuman3 OK#A:01678	NM_018131.3	NP_060601.2	2.1	4.3	9.03E-08	6.07E-08	308.5	
kinetochore associated 1	KNTC1	mwghuman3 OK#A:05391	NM_014708.3	NP_055523.1	2.2	4.2	2.32E-07	0.000000265	325	
CDC28 protein kinase regulatory subunit 1B	CKS1B	mwghuman3 OK#C:0649	NM_001826.1	NP_001817.1	2.1	3.4	1.7E-08	4.99E-08	332	
ribonucleotide reductase M2 polypeptide	RRM2	mwghuman3 OK#B:3501	NM_001034.1	NP_001025.1	2.6	16.6	0.0000015	0.000000856	344	
histone 1, H2bh	HIST1H2B	mwghuman3 OK#B:2977	NM_003524.2	NP_003515.1	3.1	15.3	0.0000011	0.000000794	349	
serine/threonine kinase 6	STK6	mwghuman3 OK#A:04814	NM_198437.1	NP_940839.1	2.6	26.9	1.67E-06	7.37E-08	349.5	
M-phase phosphoprotein 1	MPHOSPH1	mwghuman3 OK#A:09885	NM_016195.2	NP_057279.2	1.9	3.8	3.29E-07	0.00000137	359.5	
cyclin B2	CCNB2	mwghuman3 OK#A:03606	NM_004701.2	NP_004692.1	2.0	3.4	6.19E-07	7.37E-09	373.5	
G protein-coupled receptor 32	GPR32	mwghuman3 OK#A:03297	NM_001506.1	NP_001497.1	3.4	42.0	1.26E-06	0.000000856	390	
endoglin	ENG	mwghuman3 OK#A:05668	NM_000118.1	NP_000109.1	1.9	5.3	4.49E-07	0.000000525	418.5	
malignant fibrous histiocytoma amplified sequence 1	MFHAS1	mwghuman3 OK#A:04639	NM_004225.1	NP_004216.1	2.4	11.0	2.17E-07	0.000000243	425	
histone 1, H1c	HIST1H1C	mwghuman3 OK#A:07773	NM_005319.3	NP_005310.1	2.3	10.0	3.71E-07	0.000000375	425	
arginine vasopressin receptor 2	AVPR2	mwghuman3 OK#A:01219	NM_000054.2	NP_000045.1	2.3	22.3	8.93E-07	6.07E-08	427.5	
centromere protein F	CENPF	mwghuman3 OK#A:06471	NM_016343.2	NP_057427.3	1.7	2.6	2.51E-07	1.17564E-06	435.5	
homeo box A13	HOXA13	mwghuman3 OK#A:08971	NM_000522.2	NP_000513.2	1.7	3.5	2.61E-07	0.000000619	439.5	

Fig. 11 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
h4 histone family, member g		mwghuman3 OK#A:01329	XM_030144		3.0	13.2	2.33E-06	0.00000179	463	
MGC27121 gene		mwghuman3 OK#C:3953	NM_0010013 43.1	NP_0010013 43.1	3.6	46.3	1.891E-06	5.18452E-06	481.5	
nucleoside phosphorylase asp (abnormal spindle)-like, microcephaly associated	NP	mwghuman3 OK#A:03762	NM_000270.1	NP_000261.1	1.9	4.2	2.7E-07	0.000000375	497	
protein ffl11871	ASPM	mwghuman3 OK#A:01367	NM_018136.2	NP_060606.2	2.4	14.5	7.55E-07	0.00000187	504.5	
likely ortholog of mouse limb-bud and heart gene		mwghuman3 OK#A:10682	NM_025117		2.0	13.2	1.96E-06	0.000001	511	
nudix (nucleoside diphosphate linked moiety X)-type motif 1	LBH	mwghuman3 OK#B:7280	NM_030915.1	NP_112177.1	1.7	4.7	2.64E-07	0.000000223	528	
helicase, lymphoid-specific	NUDT1	mwghuman3 OK#A:05916	NM_198954.1	NP_945192.1	1.9	3.7	5.12E-08	0.000000444	546.5	
ankyrin repeat and SOCS box-containing 9	HELLS	mwghuman3 OK#A:00387	NM_018063.3	NP_060533.2	1.8	4.3	5.874E-07	3.74678E-07	550	
MCM5	ASB9	mwghuman3 OK#A:01131	NM_024087.1	NP_076992.1	1.7	5.9	1.27E-06	0.0000016	556	
minichromosome maintenance deficient 5	MCM5	mwghuman3 OK#A:07747	NM_006739.2	NP_006730.2	1.7	3.3	7.631E-08	1.55499E-07	557.5	
IGF-II mRNA-binding protein 2	IMP-2	mwghuman3 OK#A:09784	NM_006548.3	NP_006539.2	2.1	4.9	3.964E-06	1.17464E-05	575	
hypothetical protein	DKFZP566 M1046	mwghuman3 OK#B:8751	NM_032127.1	NP_115503.1	1.8	5.7	2.214E-06	1.37393E-06	594.5	
tubulin, alpha 2	TUBA2	mwghuman3 OK#B:4654	NM_079836.1	NP_524575.1	1.8	3.9	6.73E-07	0.00000217	602	
growth arrest-specific 2 like 3	GAS2L3	mwghuman3 OK#C:3659	NM_174942.1	NP_777602.1	2.0	5.6	7.484E-07	2.91943E-06	604	

Fig. 11 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
hypothetical protein FLJ12442 MCM6		mwghuman3 OK#B:2460	NM_022908.1	NP_075059.1	1.7	2.9	1.54E-08	3.63E-09	614	
minichromosome maintenance deficient 6	MCM6	mwghuman3 OK#B:8147	NM_005915.4	NP_005906.2	2.2	5.7	5.43E-07	0.000000232	653.5	
docking protein 3	DOK3	mwghuman3 OK#B:2635	NM_024872.1	NP_079148.1	2.2	12.6	1.75E-06	4.99E-08	655	
WD repeat domain 18	WDR18	mwghuman3 OK#B:3546	NM_024100.2	NP_077005.2	2.0	8.7	9.89E-07	4.99E-08	677	
cytoskeleton associated		mwghuman3								
protein 2	CKAP2	OK#A:00670	NM_018204.2	NP_060674.2	1.8	4.3	3.106E-06	1.93628E-05	701.5	
kinesin family member 20A	KIF20A	mwghuman3 OK#A:07989	NM_005733.1	NP_005724.1	1.9	2.8	1.045E-06	1.07593E-07	707.5	
putative fap protein		mwghuman3 OK#B:5292	U63542		2.1	18.9	4.98E-06	0.0000045	718	
chromosome 6 open reading frame 32	C6orf32	mwghuman3 OK#A:04643	NM_015864.2	NP_056948.2	1.8	11.4	1.527E-07	1.29514E-07	721.5	
NIMA (never in mitosis gene a)- related kinase 2	NEK2	mwghuman3 OK#A:00847	NM_002497.2	NP_002488.1	2.0	3.5	1.023E-05	3.37794E-06	732	
cryptochrome 1 (photolyase-like)	CRY1	mwghuman3 OK#A:06219	NM_004075.2	NP_004066.1	1.8	3.0	6.04E-06	0.000001	744	
transglutaminase 2	TGM2	mwghuman3 OK#A:08571	NM_004613.2	NP_004604.2	2.0	6.3	1.498E-05	3.37794E-06	747	
discs, large	DLG7	mwghuman3 OK#B:7380	NM_014750.3	NP_055565.2	2.0	5.9	1.353E-05	1.17484E-05	748	
homolog 7 eukaryotic translation initiation factor 2C	EIF2C2	mwghuman3 OK#C:2287	NM_012154.2	NP_036286.2	1.7	2.7	1.73E-08	9.25E-09	766	
DEP domain containing 1	DEPDC1	mwghuman3 OK#B:7337	NM_017779.3	NP_060249.2	2.0	4.6	1.722E-06	3.15648E-07	776	
histone 2, H4	HIST2H4	mwghuman3 OK#C:1932	NM_003548.2	NP_003539.1	1.7	2.7	3.279E-06	2.91943E-06	823	

Fig. 11 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
baculoviral IAP repeat-containing 5 (survivin) MCM7	BIRC5	mwghuman3 OK#B:0833	NM_001168.1	NP_001159.1	2.6	54.8	4.87E-06	0.000000856	823	
minichromosome maintenance deficient 7 methylthioadenos ine	MCM7	mwghuman3 OK#B:7620	NM_182776.1	NP_877577.1	1.9	4.0	1.13E-06	0.0000103	829	
phosphorylase kinetochore associated 2	MTAP	mwghuman3 OK#B:8310 mwghuman3 OK#A:10053	AF109294.1	AAD19641.1	2.3	13.3	1.033E-05	1.33979E-05	844.5	
HSPC150 protein similar to ubiquitin- conjugating enzyme	KNTC2	mwghuman3 OK#A:10053	NM_006101.1	NP_006092.1	1.6	2.9	1.169E-06	2.17032E-06	848	
SMC6 structural maintenance of chromosomes 6- like 1	HSPC150	mwghuman3 OK#A:00955	NM_014176.1	NP_054895.1	1.9	3.4	1.782E-05	1.73622E-05	849.5	
histone 1, H2bc ASF1 anti- silencing function	SMC6L1 HIST1H2B C	mwghuman3 OK#A:05363 mwghuman3 OK#B:9593	NM_024624.2	NP_078900.1	1.7	4.0	6.059E-06	1.28219E-05	852	
1 homolog B LDL receptor adaptor protein	ASF1B ARH	mwghuman3 OK#A:04415 mwghuman3 OK#B:2491 mwghuman3 OK#A:02069	NM_018154.1	NP_060624.1	1.7	4.1	1.04E-06	0.0000016	872	
lamin B1 hypothetical protein FLJ10719 hypothetical protein FLJ10706 MAD2 mitotic arrest deficient- like 1	LMNB1	mwghuman3 OK#B:2212 mwghuman3 OK#A:00611 mwghuman3 OK#A:06387	NM_015627.1	NP_056442.1	2.0	14.0	4.01E-06	0.000000155	872	
			NM_005573.2	NP_005564.1	1.8	3.4	2.869E-05	1.52615E-05	891.5	
			NM_018193.1	NP_060663.1	1.7	3.4	4.715E-06	8.99315E-06	894.5	
			NM_018186.2	NP_060656.2	1.5	2.8	1.483E-06	1.00418E-06	913	
	MAD2L1		NM_002358.2	NP_002349.1	1.8	3.9	1.058E-05	2.87228E-05	913.5	

Fig. 11 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
solute carrier family 22 hypothetical protein	SLC22A2	mwghuman3 OK#A:02704	NM_153191.1	NP_694861.1	3.2	31.3	0.0000171	0.0000287	915.5	
MGC34923 sperm associated antigen 5	SPAG5	mwghuman3 OK#C:4473 mwghuman3 OK#A:07691	NM_144717.2 NM_008461.2	NP_653318.2 NP_006452.2	1.9 2.8	8.7 6.6	6.72E-07 0.0000482	0.000000525 0.0000171	937.5 947	
activin A receptor type II-like 1 Down syndrome critical region	ACVRL1	mwghuman3 OK#A:00470	NM_000020.1	NP_000011.1	1.5	2.4	6.94E-06	0.00000733	961	
gene 1 protease, serine, 15	DSCR1	mwghuman3 OK#A:09846 mwghuman3 OK#A:03353	NM_004414.5 NM_004793.2	NP_004405.3 NP_004784.2	1.5 1.9	2.7 15.2	1.119E-06 0.0000135	2.91943E-06 0.00000292	967 969	
S100 calcium binding protein A9	S100A9	mwghuman3 OK#A:07436	NM_002965.2	NP_002956.1	4.1	44.0	0.0000071	0.0000525	975	
MCM4 minichromosome maintenance deficient 4 suppression of tumorigenicity 7 like	MCM4	mwghuman3 OK#B:7581	NM_182746.1	NP_877423.1	1.6	3.9	0.0000039	0.00000785	986.5	
pleckstrin homology domain containing, family A	ST7L	mwghuman3 OK#A:01391	NM_138728.2	NP_620056.1	2.0	13.4	7.64E-06	0.00000292	1001	
(phosphoinositide binding specific) member 4	PLEKHA4	mwghuman3 OK#B:3447	NM_020904.1	NP_065955.1	1.4	3.0	1.28E-07	0.000000444	1030.5	
EphB1	EPHB1	mwghuman3 OK#A:00465	NM_004441.2	NP_004432.1	2.2	9.5	2.334E-05	1.52615E-05	1042.5	
caldesmon 1	CALD1	mwghuman3 OK#A:07744	NM_033140.2	NP_149131.1	2.2	7.0	1.129E-05	8.32858E-05	1057	

Fig. 11 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
SMC1 structural maintenance of chromosomes 1- like 1	SMC1L1	mwghuman3 OK#A:05798	NM_006306.2	NP_006297.2	1.6	2.9	4.98E-06	0.0000134	1061.5	
Thy-1 co- transcribed		mwghuman3 OK#C:0578	NM_033209.2	NP_149986.1	1.8	4.7	1.15E-06	0.00000375	1074	
RA-regulated nuclear matrix- associated protein	RAMP	mwghuman3 OK#A:03935	NM_016448.1	NP_057532.1	1.5	2.1	4.19E-07	7.28584E-07	1076	
FK506 binding protein 11	FKBP11	mwghuman3 OK#A:07244	NM_016594.1	NP_057678.1	1.8	5.0	0.0000122	0.0000287	1088.5	
chromosome 20 open reading frame 129	C20orf129	mwghuman3 OK#B:3650	NM_030919.1	NP_112181.1	1.6	2.4	2.438E-05	2.91943E-06	1106	
histone 1, H4h cyclin-dependent	HIIST1H4H	mwghuman3 OK#B:4596	NM_003543.3	NP_003534.1	2.1	6.4	0.0000344	0.000059	1117	
kinase inhibitor 3 melanoma cell	CDKN3	mwghuman3 OK#A:05799	NM_005192.2	NP_005183.2	2.1	4.7	7.871E-05	1.93626E-05	1117.5	
adhesion molecule	MCAM	mwghuman3 OK#A:10599	NM_006500.1	NP_006491.1	1.6	3.0	1.81E-06	0.0000045	1135.5	
synuclein, alpha interacting protein	SNCAIP	mwghuman3 OK#A:08103	NM_005460.1	NP_005451.1	1.7	2.7	0.0000151	0.0000236	1151.5	
nipsnap homolog 1	NIPSNAP1	mwghuman3 OK#A:10699	NM_003634.1	NP_003625.1	2.4	21.5	0.0000194	0.0000153	1165.5	
adaptor-related protein complex 1, mu 1 subunit	AP1M1	mwghuman3 OK#B:1553	NM_032493.2	NP_115882.1	1.5	4.1	6.692E-06	8.99315E-06	1173.5	
anillin, actin binding protein	ANLN	mwghuman3 OK#A:05280	NM_018685.2	NP_061155.2	2.6	7.7	0.0001	0.0000716	1177	
chromosome 6 open reading frame 69	C6orf69	mwghuman3 OK#C:0854	NM_173562.3	NP_775833.2	1.6	3.6	3.55E-07	0.000000856	1187	

Fig. 11 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
transducer of regulated cAMP response element-binding protein	TORC3	mwghuman3 OK#A:04006	NM_022769.1	NP_073606.2	1.6	2.8	1.51E-05	1.73622E-05	1187.5	
MYC-associated zinc finger protein	MAZ	mwghuman3 OK#A:04363	NM_002383.1	NP_002374.1	1.6	3.5	0.000017	0.0000325	1195.5	
thioredoxin reductase 1	TXNRD1	mwghuman3 OK#A:02930	NM_182743.1	NP_877420.1	2.4	16.9	0.0000377	0.0000254	1201	
hypothetical protein		mwghuman3 OK#B:5965	XM_096695		1.5	3.2	5.361E-06	2.51921E-06	1211.5	
xp_096695 chromosome 22 open reading frame 4	C22orf4	mwghuman3 OK#B:9849	NM_014346.1	NP_055161.1	1.5	2.3	1.056E-05	1.33979E-05	1234	
visinin-like 1 similar to	VSNL1	mwghuman3 OK#A:06227	NM_003385.3	NP_003376.2	2.2	13.8	0.0000215	0.0000254	1243.5	
Carboxypeptidas e N 83 kDa chain		mwghuman3 OK#B:4922	XM_209550.5	XP_209550.4	2.0	10.5	0.0000141	0.00000899	1256.5	
KIAA1598 hypothetical protein fjl13501	KIAA1598	mwghuman3 OK#A:10158	NM_018330.3	NP_060800.2	1.9	18.9	6.547E-05	8.56146E-07	1271	
DKFZP434O047 protein	DKFZP434 O047	mwghuman3 OK#A:06319	NM_025007		2.0	5.7	3.162E-05	2.23862E-05	1285	
hypothetical protein FLJ38716 similar to		mwghuman3 OK#A:08783	NM_015594.1	NP_056409.1	1.8	4.5	9.622E-06	4.13751E-05	1290.5	
hypothetical protein (L1H 3 region)		mwghuman3 OK#B:7389	NM_152367.1	NP_689580.1	1.9	4.0	9.5E-06	2.87228E-05	1291.5	
hypothetical protein KIAA1875 primase, polypeptide 1	PRIM1	mwghuman3 OK#A:02711	XM_372039.1	XP_372039.2	1.9	3.5	3.977E-05	1.73622E-05	1295.5	
		mwghuman3 OK#B:5745	XM_291269.3	XP_291269.2	1.6	2.4	2.655E-05	1.33979E-05	1313.5	
		mwghuman3 OK#A:07833	NM_000946.2	NP_000937.1	1.6	2.9	3.313E-05	5.24719E-05	1315	

Fig. 11 (continued)

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Gene Name	HUGO	MWVG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
hypothetical protein BC001096 MCM2		mwghuman3 OK#B:6914	NM_138389.1	NP_612398.1	1.7	3.3	0.0000359	0.0000367	1318.5	
minichromosome maintenance		mwghuman3								
deficient 2	MCM2	OK#A:08834	NM_004526.2	NP_004517.2	1.6	2.7	1.81E-06	0.0000045	1332	
gap junction		mwghuman3								
protein, alpha 3	GJA3	OK#A:04569	NM_021954.2	NP_068773.2	1.6	2.7	1.04E-06	0.00000252	1332.5	
chromosome 11										
open reading		mwghuman3								
frame 30	C11orf30	OK#A:10832	NM_020193.2	NP_064578.2	1.4	3.4	6.848E-07	1.00418E-06	1339	
similar to										
hypothetical		mwghuman3								
protein FLJ30672		OK#B:9577	XM_376318.1	XP_376318.1	1.6	2.3	3.03E-05	2.53726E-05	1349	
Thy-1 co- transcribed		mwghuman3								
(LOC94105)	THY1	OK#A:07498	NM_033209.2	NP_149986.1	1.5	3.4	1.262E-05	2.53726E-05	1353	
low density lipoprotein										
receptor-related		mwghuman3								
protein 3	LRP3	OK#A:05066	NM_002333.1	NP_002324.1	1.5	2.1	1.068E-05	1.9727E-05	1358	
LAG1 longevity assurance		mwghuman3								
homolog 2	LASS2	OK#A:00827	NM_013384.3	NP_037516.3	1.7	4.6	0.0000173	0.0000224	1365	
chromosome 18										
open reading		mwghuman3								
frame 8	C18orf8	OK#A:07371	NM_013326.2	NP_037458.2	1.5	2.1	6.11E-06	0.00000899	1366.5	
zinc finger protein		mwghuman3								
81	ZNF81	OK#B:1067	NM_007137.1	NP_009068.1	1.5	2.2	2.599E-06	1.8667E-06	1387.5	
nuclear prelamin										
A recognition factor	NARF	mwghuman3 OK#A:02301	NM_031968.1	NP_114174.1	1.5	2.5	8.752E-06	1.73622E-05	1391.5	

Fig. 11 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
methylenetetrahydrofolate dehydrogenase (NAD ⁺ dependent)	MTHFD2	mwghuman3 OK#A:01688	NM_006636.2	NP_006627.1	2.4	8.4	0.0000861	0.00013	1392.5	
dihydrolipamide branched chain transacylase E2	DBT	mwghuman3 OK#B:6654	NM_001918.1	NP_001909.1	1.6	2.3	4.015E-05	8.99315E-06	1398.5	
sialyltransferase 7D	SIAT7D	mwghuman3 OK#A:03286	NM_175040.1	NP_778205.1	1.7	7.9	3.17E-06	0.00000596	1400	
matrix metalloproteinase-like 1	MMPL1	mwghuman3 OK#A:02674	NM_004142.1	NP_004133.1	1.5	3.4	1.36E-06	2.91943E-06	1403	
kallikrein 11	KLK11	mwghuman3 OK#A:09721	NM_144947.1	NP_659196.1	1.5	2.3	0.0000159	0.0000153	1415.5	
karyopherin alpha 2	KPNA2	mwghuman3 OK#B:4036	NM_002266.1	NP_002257.1	1.6	3.3	9.792E-05	5.89923E-05	1426.5	
FGFR1										
oncogene partner 2	FGFR1OP2	mwghuman3 OK#B:2210	NM_015633.1	NP_056448.1	1.5	5.0	1.338E-05	1.33979E-05	1427.5	
vimentin	VIM	mwghuman3 OK#A:02879	NM_003380.1	NP_003371.1	3.3	19.1	0.000123	0.0002	1451	
FLJ44108 protein poly(A)		mwghuman3 OK#B:0931	XM_379827.1	XP_379827.1	1.7	2.9	7.746E-05	2.53726E-05	1474	
polymerase gamma	PAPOLG	mwghuman3 OK#A:03836	NM_022894.2	NP_075045.2	2.7	36.2	0.0000757	0.0000932	1474.5	
formin homology 2 domain										
containing 1	FHOD1	mwghuman3 OK#A:05058	NM_013241.1	NP_037373.1	1.6	4.0	9.54E-06	0.00000187	1483.5	
RAS-like, family 12 (RASL12)	RASL12	mwghuman3 OK#A:07221	NM_016563.2	NP_057647.1	1.4	2.1	1.179E-05	2.23862E-05	1490.5	
high-mobility group										
nucleosomal binding domain 2	HMGN2	mwghuman3 OK#B:9113	NM_005517.2	NP_005508.1	1.6	2.7	0.0000826	0.0000367	1495.5	

Fig. 11 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
phosphatidylinositol transfer protein, membrane-associated 2	PITPNM2	mwghuman3 OK#B:8464	NM_020845	NP_06589	2.3	26.2	0.0000711	0.0000224	1497	
derlin-1	DER1	mwghuman3 OK#A:01654	NM_024295.3	NP_077271.1	1.5	3.3	4.883E-05	5.24719E-05	1527	
EphA4 V-set and immunoglobulin domain containing 1 regulator of G-protein signalling 5	EPHA4	mwghuman3 OK#A:04433	NM_004438.3	NP_004429.1	1.5	3.1	0.0000113	0.0000743	1527.5	
	VSIG1	mwghuman3 OK#B:6454	NM_182607.3	NP_872413.1	2.0	5.8	7.831E-05	3.24786E-05	1532.5	
	RGS5	mwghuman3 OK#B:0128 mwghuman3 OK#B:4938	NM_003617.2 XM_290923.2	NP_003608.1 XP_290923.3	1.8 1.9	6.3 11.5	0.0000417 2.676E-05	0.0000174 1.9727E-05	1534.5 1540.5	
KIAA1639 protein	SH2B	mwghuman3 OK#B:8571	NM_015503.1	NP_056318.1	2.2	13.2	0.0000252	0.0000197	1556.5	
SH2-B homolog peptidoglycan recognition protein 4	PGLYRP4	mwghuman3 OK#A:00688	NM_020393.1	NP_065126.1	1.5	3.2	2.991E-06	4.50136E-06	1566	
CDC45 cell division cycle 45-like male sterility domain containing 1 hypothetical protein	CDC45L	mwghuman3 OK#A:09331	NM_003504.3	NP_003495.1	1.8	2.9	6.316E-05	0.000129985	1567.5	
MLSTD1	MLSTD1	mwghuman3 OK#A:04600	NM_018099.3	NP_060569.3	1.9	10.0	6.279E-05	3.66781E-05	1585.5	
MGC11266 tumor necrosis factor receptor superfamily, member 13B	TNFRSF13B	mwghuman3 OK#A:10595	NM_024322.1	NP_077298.1	1.5	3.4	5.16E-05	6.62502E-05	1608	
		mwghuman3 OK#A:00922	NM_012452.2	NP_036584.1	1.7	3.8	2.737E-05	6.62502E-05	1643	

Fig. 11 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
neuroepithelial cell transforming gene 1	NET1	mwghuman3 OK#B:5122	S82401.1	AAB37683.1	1.4	2.1	8.678E-06	4.50136E-06	1657	
lipoma HMGIC fusion partner-like 5	LHFPL5	mwghuman3 OK#C:9217	NM_182548.2	NP_872354.1	1.7	9.5	5.419E-05	4.66208E-05	1661	
myxovirus (influenza virus) resistance 2	MX2	mwghuman3 OK#A:10346	NM_002463.1	NP_002454.1	1.6	9.3	0.0000739	0.000001	1680	
sphingosine kinase 1	SPHK1	mwghuman3 OK#C:2264	NM_182965.1	NP_892010.1	1.5	2.2	2.284E-06	5.18452E-06	1702	
ATP-binding cassette, sub- family G	ABCG4	mwghuman3 OK#A:02044	NM_022169.3	NP_071452.2	1.7	8.3	0.000012	0.0000039	1702	
(WHTE), member 4 serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 2	SERPINE2	mwghuman3 OK#A:10076	NM_002575.1	NP_002566.1	1.8	8.3	3.09E-05	2.50475E-05	1705.5	
UDP-N-acetyl- alpha-D- galactosamine:po lypeptide N- acetylglactosami nyltransferase 10	GALNT10	mwghuman3 OK#A:10048	NM_017540.3	NP_060010.3	1.6	7.1	6.432E-05	2.23862E-05	1711	
leptin receptor MAX dimerization protein 4	LEPR	mwghuman3 OK#B:5260	NM_0010036 80.1	NP_0010036 80.1	1.6	2.8	2.176E-05	2.87228E-05	1715.5	
phosphoinositol 4-phosphate adaptor protein-2	MXD4	mwghuman3 OK#A:08296	NM_006454.2	NP_006445.1	1.7	4.1	0.0000111	0.0000134	1719.5	
nucleoporin 210	FAPP2	mwghuman3 OK#A:06904	NM_032639.2	NP_116028.1	1.5	3.3	1.563E-05	3.66781E-05	1725.5	
	NUP210	mwghuman3 OK#B:7411	NM_024923.2	NP_079199.2	1.6	2.8	6.528E-05	0.000104262	1728.5	

Fig. 11 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
c-src tyrosine kinase	CSK	mwghuman3 OK#A:01629	NM_004383.1	NP_004374.1	1.5	5.1	7.283E-06	8.56146E-07	3601	
neuroligin 1	NRP1	mwghuman3 OK#A:03091	NM_003873.2	NP_003864.2	2.3	17.2	0.002761	0.004728544	6356	

Fig. 11 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
neurtin 1 mannosyl (alpha-1,3-) glycoprotein beta-1,2-N-	NPR1	mwghuman3 OK#A:00658	NM_016588.2	NP_057672.1	3.0	17.6	4.78E-07	0.000000421	63	S
acetylglucosamin yltransferase KIAA0100 gene product	MGAT1	mwghuman3 OK#A:09187 mwghuman3 OK#A:10762 mwghuman3 OK#B:9472 mwghuman3 OK#B:3555	NM_002406.2 NM_014680.2 NM_022164.1 NM_058199.2	NP_002397.1 NP_055495.2 NP_071447.1 NP_478106.1	1.7 1.6 1.8 1.8	4.1 2.5 5.6 6.9	3.51E-07 1.74E-08 0.000015 3.39E-06	0.00000395 0.000000085 0.0000271 0.00000178	165.5 241 436.5 455	S S S S
lipocalin 7	LCN7									
olfactomedin 1 bone	OLFM1									
morphogenetic protein 7 A midkine (neurite growth- promoting factor 2)	BMP7	mwghuman3 OK#A:09963	NM_001719.1	NP_001710.1	1.7	4.1	2.96E-06	0.00000579	473	S
a disintegrin-like and metalloprotease (reprolysin type) with	MDK	mwghuman3 OK#B:4650	NM_002391.2	NP_002382.1	1.8	4.8	4.98E-07	0.000000194	492.5	S
thrombospondin type 1 motif, 10	ADAMTS1 0	mwghuman3 OK#B:1355 mwghuman3 OK#A:00608	NM_030957.1 NM_014287.2	NP_112219.2 NP_055102.3	1.9 1.6	6.9 2.5	0.0000442 0.000017	0.0000379 0.0000339	569.5 598.5	S S
pM5 protein tissue inhibitor of metalloproteinase 1	PM5 TIMP1	mwghuman3 OK#A:08048 mwghuman3 OK#A:09199	NM_003254.1 NM_002345.2	NP_003245.1 NP_002336.1	1.7 2.5	3.2 19.1	0.0000185 0.000104	0.0000107 0.0000883	611.5 632	S S
lunican	LUM									

Fig. 12

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
EGF-like-domain, multiple 6	EGFL6	mwghuman3 OK#A:07688	NM_015507.2	NP_056322.2	1.9	4.2	0.0000747	0.0000243	712	S
NODAL modulator 3	NOMO3	mwghuman3 OK#A:08071	NM_173614.1	NP_775885.1	1.5	3.0	1.71E-06	0.00000395	844.5	S
insulin-like growth factor binding protein 5	IGFBP5	mwghuman3 OK#C:1077	NM_000599.2	NP_000590.1	2.3	15.0	0.0000791	0.000284	859.5	S
hexosaminidase A (alpha polypeptide)	HEXA	mwghuman3 OK#B:9777	NM_000520.2	NP_000511.1	1.5	3.1	0.0000386	0.0000718	903.5	S
serine (or cysteine) proteinase inhibitor, clade H (heat shock protein 47), member 1	SERPINH1	mwghuman3 OK#A:08615	NM_001235.2	NP_001226.2	1.5	3.2	0.0000043	0.0000107	1070.5	S
carboxypeptidase A6	CPA6	mwghuman3 OK#A:02979	NM_020361.2	NP_065094.2	1.4	3.2	0.0000154	0.0000271	1098.5	S
natriluretic peptide	NPPC	mwghuman3 OK#A:06602	NM_024409.1	NP_077720.1	1.5	3.1	8.17E-06	0.0000121	1134	S
precursor C	PRSS11	mwghuman3 OK#B:1274	NM_002775.2	NP_002766.1	1.4	2.6	0.0000125	0.0000523	1151.5	S
protease, serine, 11	IGFBP7	mwghuman3 OK#A:03385	NM_001553.1	NP_001544.1	1.8	4.2	0.000239	0.000756	1222	S
insulin-like growth factor binding protein 7	FLJ23221	mwghuman3 OK#A:06273	NM_024579.1	NP_078855.1	1.5	2.8	0.000598	0.000375	1277.5	S
hypothetical protein	ERP70	mwghuman3 OK#A:03979	NM_004911.3	NP_004902.1	1.5	3.9	0.000321	0.000215	1419	S
protein disulfide isomerase related protein										

Fig. 12 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
UDP-N-acetyl-alpha-D-galactosamine: polypeptide N-acetylglucosaminyltransferase 14 (GalNAc-T14)	GALNT14	mwghuman3 OK#B:4583	BC010659.1	AAH10659.1	1.4	2.4	0.000215	0.000312	1450.5	S
inter-alpha (globulin) inhibitor H3	ITIH3	mwghuman3 OK#B:7988	NM_002217.1	NP_002208.2	1.5	3.0	0.000317	0.000972	1504	S
pappalysin 2	PAPPA2	mwghuman3 OK#B:1636	NM_020318.1	NP_064714.1	1.5	2.8	0.000358	0.000584	1584	S
lysyl oxidase-like 1	LOXL1	mwghuman3 OK#A:07055	NM_005576.1	NP_005567.1	1.6	5.5	0.0001	0.000259	1598.5	S
secreted phosphoprotein 1	SPP1	mwghuman3 OK#A:09441	NM_000582.2	NP_000573.1	2.7	139.1	0.000577	0.00185	1789	S
tumor necrosis factor receptor superfamily, member 6b, decoy	TNFRSF6B	mwghuman3 OK#A:05069	NM_032945.2	NP_116563.1	2.0	6.8	0.001594	0.001244	1901.5	S
secreted protein, acidic, cysteine-rich (osteonectin)	SPARC	mwghuman3 OK#A:08092	NM_003118.2	NP_003109.1	1.7	4.5	0.000359	0.000895	2512	S
sulfatase 1	SULF1	mwghuman3 OK#B:8770	NM_015170.1	NP_055985.1	2.5	67.3	0.007144	0.000895	2581	S
microseminoprotein, beta	MSMB	mwghuman3 OK#B:4000	NM_002443.2	NP_002434.1	1.6	11.8	0.00535	0.042817	6739.5	S
toiloid-like 2	TLL2	mwghuman3 OK#A:02932	NM_012465.2	NP_036597.1	1.9	29.2	0.036032	0.070205	8875.5	S
semaphorin sem2 (LOC59920)	SEM2	mwghuman3 OK#A:05073	NM_020163.1	NP_064548.1	1.2	1.8	0.0172289	0.01761606	10677	S

Fig. 12 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3F	SEMA3F	mwghuman3 OK#A:07262	NM_004186.2	NP_004177.2	1.7	19.5	0.2804993	0.3890127	23988.5	S
endoglin	ENG	mwghuman3 OK#A:05668	NM_000118.1	NP_000109.1	1.9	3.7	2.76E-10	1.75E-09	37	
claudin 6	CLDN6	mwghuman3 OK#A:08357	NM_021195.3	NP_067018.1	2.2	6.7	1.84E-07	0.000000881	59	
prothymosin, alpha (gene sequence 28)	PTMA	mwghuman3 OK#B:9039	NM_002823.2	NP_002814.2	1.9	6.0	1.17E-07	0.00000031	77.5	
nipsnap homolog 1	NIPSNAP1	mwghuman3 OK#A:10699	NM_003634.1	NP_003625.1	2.0	4.0	3.08E-07	0.000000362	92.5	
arginine vasopressin receptor 2 (nephrogenic diabetes insipidus)	AVPR2	mwghuman3 OK#A:01219	NM_000054.2	NP_000045.1	1.7	3.7	1.2E-07	0.000000227	98	
malignant fibrous histiocytoma amplified sequence 1	MFHAS1	mwghuman3 OK#A:04639	NM_004225.1	NP_004216.1	2.2	9.3	1.68E-09	2.62E-08	120	
homeo box A13 myxovirus (influenza virus) resistance 2	HOXA13	mwghuman3 OK#A:08971	NM_000522.2	NP_000513.2	1.9	6.4	7.15E-07	0.000000421	122	
	MX2	mwghuman3 OK#A:10346	NM_002463.1	NP_002454.1	1.9	6.6	1.42E-06	0.000000659	156.5	

Fig. 12 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
similar to sodium- and chloride-dependent creatine transporter transmembrane protein 19 prostaglandin I2 (prostacyclin) receptor (IP) hypothetical protein xp_047287 hypothetical protein flj11871 proline synthetase co-transcribed homolog	TMEM19	mwghuman3 OK#C:4265	NM_198857.1	NP_942154.1	1.8	4.1	1.78E-06	0.0000051	164	
		mwghuman3 OK#B:7083	NM_018279.2	NP_060749.2	1.8	3.0	3.14E-06	0.00000204	175	
		mwghuman3 OK#A:00268	NM_000960.3	NP_000951.1	2.1	9.9	4.88E-06	0.00000449	205	
hypothetical protein xp_047287	PTGIR	mwghuman3 OK#B:6955	XM_047287		1.6	3.9	2.89E-07	0.000000881	235	
hypothetical protein flj11871		mwghuman3 OK#A:10682	NM_025117		1.6	3.3	6.94E-07	0.00000102	240.5	
proline synthetase co-transcribed homolog	PROSC	mwghuman3 OK#B:0341	NM_007198.2	NP_009129.1	1.7	3.8	3.41E-07	0.00000233	270	
G protein-coupled receptor 32	GPR32	mwghuman3 OK#A:03297	NM_001506.1	NP_001497.1	2.4	21.8	0.0000154	0.0000216	322	
hypothetical protein MGC34923		mwghuman3 OK#C:4473	NM_144717.2	NP_653318.2	1.5	2.7	0.0000015	0.00000117	323	
MGC27121 gene NAD(P)H dehydrogenase, quinone 1	NQO1	mwghuman3 OK#C:3953	NM_0010013 43.1	NP_0010013 43.1	2.6	10.4	0.0000214	0.0000243	333	
		mwghuman3 OK#A:06176	NM_000903.1	NP_000894.1	2.6	17.7	7.17E-06	0.0000422	352.5	
cytoskeleton-associated protein 4	CKAP4	mwghuman3 OK#A:01860	NM_006825.2	NP_006816.2	1.8	4.9	0.0000029	0.00000233	382	
sialyltransferase 7D	SIAT7D	mwghuman3 OK#A:03286	NM_175040.1	NP_778205.1	1.6	2.6	4.14E-09	6.34E-09	394	

Fig. 12 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
hypothetical protein BC001096		mwghuman3 OK#B:6914	NM_138389.1	NP_612398.1	1.6	3.6	1.99E-07	0.0000000421	394	
3-phosphoinositide dependent protein kinase-1		mwghuman3 OK#A:10300	NM_002613.2	NP_002604.1	1.5	2.1	0.0000192	0.00000135	438	
phosphatidylinositol transfer protein, membrane-associated 2	PITPNM2	mwghuman3 OK#B:8464	AB040890.2	BAA95981.2	2.1	7.8	0.0000309	0.00000579	448	
mitotic spindle assembly 1 molecule		mwghuman3 OK#A:09972	XM_040863		2.0	11.1	0.0000219	0.0000271	449.5	
interacting with Rab13	MIRAB13	mwghuman3 OK#C:0021	NM_033386.1	NP_203744.1	1.5	3.0	2.16E-06	0.0000084	457.5	
protease, serine, 15	PRSS15	mwghuman3 OK#A:03353	NM_004793.2	NP_004784.2	1.5	2.7	0.0000101	0.0000136	497	
porcupine homolog	PORCN	mwghuman3 OK#A:00520	NM_203476.1	NP_982302.1	1.6	3.4	7.61E-06	0.0000243	528	
likely ortholog of mouse limb-bud and heart gene		mwghuman3 OK#B:7280	NM_030915.1	NP_112177.1	1.6	3.8	3.35E-07	0.000000266	534.5	
sine oculis homeobox	LBH									
homolog 6	SIX6	mwghuman3 OK#A:10145	NM_007374.1	NP_031400.1	1.5	2.4	0.0000131	0.00000949	538	
gap junction protein, beta 2A	GJB2	mwghuman3 OK#A:09852	NM_004004.3	NP_003995.2	1.6	4.1	0.0000164	0.0000977	541.5	
FLJ35784		mwghuman3 OK#C:4803	NM_198534.1	NP_940936.1	2.0	5.2	0.0000295	0.0000304	563.5	
protein cell division cycle 2	CDC2	mwghuman3 OK#A:05382	NM_033379.2	NP_203698.1	2.4	7.8	0.0000208	0.000284	582.5	

Fig. 12 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
solute carrier family 37 (glycerol-3-phosphate transporter), member 3	SLC37A3	mwghuman3 OK#B:8722	NM_207113.1	NP_996996.1	1.5	3.8	7.99E-07	0.00000117	596	
sprouty homolog 4	SPRY4	mwghuman3 OK#C:0553	NM_030964.2	NP_112226.2	1.5	3.1	3.13E-06	0.0000084	597.5	
LIM homeobox 3	LHX3	mwghuman3 OK#A:02580	NM_178138.2	NP_835258.1	1.4	2.2	1.73E-06	0.00000049	608.5	
chromosome 7 open reading frame 27	C7orf27	mwghuman3 OK#B:2531	NM_152743.1	NP_689956.1	1.6	3.2	2.33E-06	0.00000102	648.5	
LDL receptor adaptor protein	ARH	mwghuman3 OK#B:2491	NM_015627.1	NP_056442.1	1.5	3.1	0.0000141	0.0000216	649	
solute carrier family 39 (zinc transporter), member 1	SLC39A1	mwghuman3 OK#A:02443	NM_014437.3	NP_055252.2	1.6	3.7	0.0000296	0.0000496	652	
zinc finger protein 307 (ZNF307)	ZNF307	mwghuman3 OK#A:08705	NM_019110.3	NP_061983.2	1.5	3.8	5.01E-06	0.00000743	658	
macrophage migration inhibitory factor	MIF	mwghuman3 OK#A:09347	NM_002415.1	NP_002406.1	1.6	3.6	0.0000719	0.0000977	681.5	
synuclein, alpha interacting protein	SNCAIP	mwghuman3 OK#A:08103	NM_005460.1	NP_005451.1	1.6	2.7	0.0000186	0.00000301	683	
bone marrow stromal cell antigen 2	BST2	mwghuman3 OK#B:4758	NM_004335.2	NP_004326.1	2.1	5.3	0.0000816	0.000236	737.5	
proline-serine-threonine phosphatase interacting protein 1	PSTPIP1	mwghuman3 OK#B:0578	NM_003978.2	NP_003969.2	1.6	3.3	2.22E-06	0.00000347	755	

Fig. 12 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
topoisomerase (DNA) II alpha MCM2	TOP2A	mwghuman3 OK#B:7144	NM_001067.2	NP_001058.2	2.0	5.5	0.0000799	0.000161	760.5	
mitochondosome maintenance deficient 2 SRY (sex determining region Y)-box 4 nuclear receptor coactivator 5	MCM2	mwghuman3 OK#A:08834	NM_004526.2	NP_004517.2	1.5	2.3	4.21E-06	0.00000395	774.5	
	SOX4	mwghuman3 OK#A:07410	NM_003107.2	NP_003098.1	1.5	4.8	4.96E-06	0.00000449	789	
	NCOA5	mwghuman3 OK#B:8592	NM_020967.1	NP_066018.1	1.6	2.8	0.0000122	0.00000223	792	
	TUBA4	mwghuman3 OK#B:2461	NM_025019.1	NP_079295.1	1.9	5.1	0.0000645	0.000161	793.5	
tubulin, alpha 4 hypothetical protein		mwghuman3 OK#C:8001	NM_152385.1	NP_689598.1	1.5	2.9	0.0000327	0.0000121	804	
FLJ31438 odd-skipped homolog	ODD	mwghuman3 OK#C:8737	NM_145260.1	NP_660303.1	1.6	5.9	0.000131	0.0000523	813	
solute carrier family 23 (nucleobase transporters), member 2	SLC23A2	mwghuman3 OK#A:04621	NM_203327.1	NP_976072.1	1.8	4.7	0.0000069	0.000132	819.5	
split hand/foot malformation (ectrodactyly) type 1	SHFM1	mwghuman3 OK#A:05669	NM_006304.1	NP_006295.1	1.6	3.3	0.0000306	0.0000647	823.5	
SFRS protein kinase 2	SRPK2	mwghuman3 OK#A:08606	NM_182692.1	NP_872634.1	1.6	6.4	0.0000197	0.0000339	848.5	
chromosome 18 open reading frame 8	C18orf8	mwghuman3 OK#A:07371	NM_013326.2	NP_037458.2	1.4	2.1	1.54E-06	0.00000347	856	
formin homology 2 domain containing 1	FHOD1	mwghuman3 OK#A:05058	NM_013241.1	NP_037373.1	1.5	2.3	0.0000106	0.0000153	863.5	

Fig. 12 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
receptor (calcitonin) activity modifying protein 2	RAMIP2	mwghuman3 OK#A:02505	NM_005854.1	NP_005845.1	1.6	4.2	0.0000208	0.0000172	866.5	
2,3-bisphosphoglycerate mutase	BPGM	mwghuman3 OK#A:00673	NM_001724.3	NP_001715.1	1.6	4.1	0.000203	0.0000523	868	
SH2-B homolog	SH2B	mwghuman3 OK#B:8571	NM_015503.1	NP_056318.1	1.7	5.7	0.0000461	0.0000647	906	
regulator of G-protein signalling 5	RGS5	mwghuman3 OK#B:0128	NM_003617.2	NP_003608.1	1.8	12.8	0.0000299	0.000177	922.5	
phosphoinositol 4-phosphate adaptor protein-2	FAPP2	mwghuman3 OK#A:06904	NM_032639.2	NP_116028.1	1.4	2.3	0.0000188	0.0000647	932.5	
coxsaekie virus and adenovirus receptor	CXADR	mwghuman3 OK#A:00118	NM_001338.3	NP_001329.1	1.9	4.7	0.000165	0.000177	935.5	
Meis1, myeloid ecotropic viral integration site 1 homolog 2	MEIS2	mwghuman3 OK#A:08006	NM_002399.2	NP_002390.1	1.5	2.8	0.0000766	0.0000883	941	
tensin-like SH2 domain containing 1	TENS1	mwghuman3 OK#A:01929	NM_022748.6	NP_073585.6	1.5	3.1	0.0000869	0.000132	946.5	
snail homolog 2	SNAI2	mwghuman3 OK#A:10656	NM_003068.3	NP_003059.1	1.8	17.9	0.0000524	0.0000339	960.5	
docking protein 3 carbohydrate (N-acetylglucosamin e-6-O)	DOK3	mwghuman3 OK#B:2635	NM_024872.1	NP_079148.1	1.6	4.8	7.57E-06	0.00000049	967.5	
sulfotransferase 2	CHST2	mwghuman3 OK#A:06174	NM_004267.2	NP_004258.2	1.7	5.2	9.87E-07	0.00000155	983	
nucleoside phosphorylase	NP	mwghuman3 OK#A:03762	NM_000270.1	NP_000261.1	1.5	4.1	0.0000189	0.0000271	996.5	

Fig. 12 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
visinin-like 1	VSNL1	mwghuman3 OK#A:06227	NM_003385.3	NP_003376.2	1.7	3.5	0.0000811	0.00012	1013	
v-yes-1										
Yamaguchi										
sarcoma viral										
related oncogene										
homolog	LYN	mwghuman3 OK#C:2653	NM_002350.1	NP_002341.1	1.6	3.5	0.0000593	0.000108	1013.5	
hepatocellular										
carcinoma-										
associated										
antigen 127	HCA127	mwghuman3 OK#B:7758	NM_018684.1	NP_061154.1	1.3	2.0	0.0000442	0.0000797	1017	
solute carrier										
family 22										
(organic cation										
transporter),										
member 2	SLC22A2	mwghuman3 OK#A:02704	NM_153191.1	NP_694861.1	2.3	12.5	0.000298	0.000535	1021	
MAX										
dimerization										
protein 4	MXD4	mwghuman3 OK#A:08296	NM_006454.2	NP_006445.1	1.4	2.5	5.21E-06	0.00000656	1025	
Thy-1 co-										
transcribed		mwghuman3 OK#A:07498	NM_033209.2	NP_149986.1	1.4	2.0	0.0000307	0.0000153	1032.5	
(LOC94105)										
Thy-1 co-										
transcribed		mwghuman3 OK#A:07498	NM_033209.2	NP_149986.1	1.4	2.0	3.072E-05	1.52973E-05	1032.5	
(LOC94105)	THY1									
leucine rich										
repeat and										
fibronectin type										
III domain										
containing 3	LRFN3	mwghuman3 OK#A:00147	NM_024509.1	NP_078785.1	1.6	2.4	0.000225	0.0000419	1035.5	
h4 histone		mwghuman3 OK#A:01329	XM_030144		1.9	12.3	0.000241	0.0000883	1040	
family, member g										
hypothetical										
protein		mwghuman3 OK#A:06789	NM_022746.2	NP_073583.2	1.5	2.4	0.0000373	0.0000172	1045.5	
FLJ22390										

Fig. 12 (continued)

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Gene Name	HUGO	MWIG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
tribbles homolog 2	TRIB2	mwghuman3 OK#A:05272	NM_021643.1	NP_067675.1	1.7	4.1	0.0000616	0.000195	1058	
keratin, hair, acidic, 3B	KRTHA3B	mwghuman3 OK#A:02682	NM_002279.3	NP_002270.1	1.3	2.1	0.0000079	0.0000271	1071.5	
kinesin family member 21A	KIF21A	mwghuman3 OK#C:0043	NM_017641.2	NP_060111.2	1.7	3.1	0.000121	0.000108	1073	
high-mobility group										
nucleosomal binding domain 2	HMG2	mwghuman3 OK#B:9113	NM_005517.2	NP_005508.1	1.5	2.9	0.000199	0.0000883	1075	
ankyrin repeat domain 17	ANKRD17	mwghuman3 OK#B:0250	NM_198889.1	NP_942592.1	1.5	2.6	0.000013	0.00000743	1089.5	
recombination activating gene 1	RAG1	mwghuman3 OK#A:09856	NM_000448.1	NP_000439.1	1.4	2.7	0.000114	0.0000797	1090	
nucleotide binding protein 2	NUBP2	mwghuman3 OK#C:1908	NM_012225.1	NP_036357.1	1.4	2.3	0.0000198	0.0000193	1097	
hypothetical protein										
FLJ20489		mwghuman3 OK#A:07462	NM_017842.1	NP_060312.1	1.4	2.7	3.49E-06	0.00000395	1100.5	
calcium/calmodulin-dependent serine protein kinase (MAGUK family)	CASK	mwghuman3 OK#A:01768	NM_003688.1	NP_003679.1	1.5	3.5	0.0000572	0.000161	1104.5	
huntingtin interacting protein 1	HIP1	mwghuman3 OK#A:05908	NM_005338.4	NP_005329.3	1.4	4.5	0.0000185	0.00000656	1110	
LAG1 longevity assurance homolog 2	LASS2	mwghuman3 OK#A:00827	NM_013384.3	NP_037516.3	1.5	2.3	0.0000311	0.000063	1111.5	
protein kinase C, delta binding protein	PRKCDBP	mwghuman3 OK#B:4639	NM_145040.2	NP_659477.2	1.6	3.5	6.96E-07	0.000000194	1123.5	

Fig. 12 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
tyrosine kinase with immunoglobulin and epidermal growth factor homology domains	TIE	mwghuman3 OK#A:05888	NM_005424.2	NP_005415.1	1.7	4.3	0.000266	0.000312	1126.5	
chromosome 5 open reading frame 15	C5orf15	mwghuman3 OK#A:10834	NM_020199.1	NP_064584.1	1.6	3.3	0.000144	0.000195	1131	
anillin, actin binding protein	ANLN	mwghuman3 OK#A:05280	NM_018685.2	NP_061155.2	2.2	6.5	0.000906	0.000332	1154	
derlin-1	DER1	mwghuman3 OK#A:01654	NM_024295.3	NP_077271.1	1.4	3.1	0.000115	0.000422	1160.5	
CGI-72 protein activin A receptor type II-like 1	CGI-72	mwghuman3 OK#C:2137	NM_016018.3	NP_057102.3	1.4	2.5	0.000047	0.000195	1165	
ectonucleoside triphosphate diphosphohydrolase 8	ACVRL1	mwghuman3 OK#A:00470	NM_000020.1	NP_000011.1	1.4	2.3	0.000113	0.0000618	1178	
SH3 domain binding glutamic acid-rich protein like 3	ENTPD8	mwghuman3 OK#C:1422	NM_138793.2	NP_620148.1	1.4	2.2	0.0000121	0.0000379	1179.5	
SMC4 structural maintenance of chromosomes 4-like 1 (yeast)	SH3BGR13	mwghuman3 OK#B:1593	NM_031286.2	NP_112576.1	1.5	2.5	0.000062	0.000177	1185.5	
NADH:ubiquinone oxidoreductase MLRQ subunit homolog	SMC4L1	mwghuman3 OK#A:05648	NM_0010027 99.1	NP_0010027 99.1	1.7	3.4	0.000271	0.000215	1190	
angiogenic factor VG5Q	VG5Q	mwghuman3 OK#B:1359	NM_020142.3	NP_064527.1	2.2	17.8	0.000123	0.000249	1196	
		mwghuman3 OK#B:2180	NM_018046.3	NP_060516.2	1.4	2.8	0.000245	0.0000582	1226.5	

Fig. 12 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
stathmin 1	STMN1	mwghuman3 OK#A:00925	NM_203401.1	NP_981946.1	1.9	11.6	0.0004	0.000342	1250	
lipidosin	BG1	mwghuman3 OK#A:08285	NM_015162.3	NP_055977.3	1.6	8.8	0.000221	0.00017	1267	
BCL2-like 11 AMP-activated protein kinase family member 5 pleckstrin homology domain containing, family A	BCL2L11	mwghuman3 OK#A:08369	NM_207003.1	NP_996886.1	1.4	2.5	0.0000689	0.000108	1271	
protein kinase family member 5 pleckstrin homology domain containing, family A (phosphoinositid e binding specific) member 4	ARK5	mwghuman3 OK#B:9070	NM_014840.2	NP_055655.1	1.5	3.1	0.000345	0.0000647	1273.5	
kalikrein 11 suppression of tumorigenicity 7 like	PLEKHA4	mwghuman3 OK#B:3447	NM_020904.1	NP_065955.1	1.4	2.6	6.69E-06	0.0000107	1278.5	
transducin-like enhancer of split 3	KLK11	mwghuman3 OK#A:09721	NM_144947.1	NP_659196.1	1.4	3.3	0.00024	0.000047	1332	
inter-alpha (globulin) inhibitor H5 regulator of G- protein signalling 11	ST7L	mwghuman3 OK#A:01391	NM_138728.2	NP_620056.1	1.5	3.3	0.000161	0.000132	1376.5	
ankyrin repeat and SOCS box- containing 9	TLE3	mwghuman3 OK#A:09092	NM_005078.1	NP_005069.1	1.3	2.1	0.0000102	0.0000084	1382.5	
	ITIH5	mwghuman3 OK#A:10153	NM_032817.2	NP_116206.2	1.4	2.4	0.000205	0.000259	1387.5	
	RGS11	mwghuman3 OK#A:09250	NM_183337.1	NP_899180.1	1.5	2.8	0.0000268	0.0000379	1400.5	
	ASB9	mwghuman3 OK#A:01131	NM_024087.1	NP_076992.1	1.4	2.5	0.000131	0.000146	1418.5	

Fig. 12 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
chromosome 6 open reading frame 69	C6orf69	mwghuman3 OK#C:0854	NM_173562.3	NP_775833.2	1.4	2.7	0.0000737	0.000195	1436	
transmembrane 7 superfamily member 3	TM7SF3	mwghuman3 OK#A:09485	NM_016551.1	NP_057635.1	1.6	3.0	0.000278	0.000535	1437	
secernin 3	SCRN3	mwghuman3 OK#A:00384	NM_024583.2	NP_078859.2	1.4	2.7	0.0000977	0.000215	1452	
cryptochrome 1	CRY1	mwghuman3 OK#A:06219	NM_004075.2	NP_004066.1	1.5	3.7	0.000377	0.000259	1457.5	
plexin A1	PLXNA1	mwghuman3 OK#B:8739	NM_032242.2	NP_115618.2	1.4	3.2	0.000107	0.000108	1474	
UDP-N-acetyl-alpha-D-galactosamine:p-olypeptide N-acetylglucosaminyltransferase 10 (GalNAc-T10)	GALNT10	mwghuman3 OK#B:6489	NM_017540.3	NP_060010.3	1.4	2.0	4.42E-06	0.000000659	1479.5	
gap junction protein, alpha 4 hypothetical	GJA4	mwghuman3 OK#A:07540	NM_002060.1	NP_002051.1	1.4	2.8	0.000427	0.000284	1488.5	
protein DKFZp434G141		mwghuman3 OK#C:3525	NM_031292.2	NP_112582.2	1.4	2.9	0.0000627	0.000156	1501	
5 WD repeat and SOCS box-containing 2A cytidine deaminase	WSB2	mwghuman3 OK#B:1353	NM_018639.3	NP_061109.1	1.4	2.5	0.0000652	0.0000523	1505	
phosphoribosylglycinamide formyltransferase	CDA	mwghuman3 OK#A:07490	NM_001785.1	NP_001776.1	1.6	3.0	0.0000477	0.0000271	1538.5	
histone 1, H1b	GART	mwghuman3 OK#A:10142	NM_000819.3	NP_000810.1	1.4	2.2	0.0000428	0.000146	1560	
	HIST1H1B	mwghuman3 OK#A:05716	NM_005322.2	NP_005313.1	1.5	4.0	0.0000929	0.000236	1578.5	

Fig. 12 (continued)

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Gene Name	HUGO	MWG oligo #	NCBI mRNA ref seq	Protein ref seq	mean fold change	max fold change	T-test	Wilcoxon test	Summated rank	Serum
zinc metalloproteinase (STE24 homolog, yeast) transmembrane protein 33	ZMPSTE24	mwghuman3 OK#A:09568	NM_005857.2	NP_005848.2	1.5	3.9	0.000166	0.000236	1653.5	
glucose phosphate isomerase hypothetical protein	TMEM33	mwghuman3 OK#A:01542	NM_018126.1	NP_060596.1	2.9	31.9	0.000365	0.002513	1669.5	
GPI		mwghuman3 OK#B:1465	NM_000175.2	NP_000166.2	1.4	2.6	0.000153	0.000236	1670.5	
protein FLJ11000 hypothetical protein		mwghuman3 OK#B:4538	NM_018295.1	NP_060765	1.6	5.1	0.000203	0.000448	1687.5	
MGC5576 calcium/calmodulin-dependent protein kinase ID		mwghuman3 OK#A:06786	NM_024056.2	NP_076961.1	1.6	11.7	0.000735	0.000312	1710	
protein tyrosine phosphatase, non-receptor type 21	CAMK1D	mwghuman3 OK#A:00327	NM_020397.1	NP_065130.1	1.4	2.6	0.00034	0.000423	1719	
eukaryotic translation initiation factor 2C	PTPN21	mwghuman3 OK#A:09269	NM_007039.2	NP_008970.1	1.4	2.4	0.000571	0.000259	1723.5	
WD repeat domain 18	EIF2C2	mwghuman3 OK#C:2287	NM_012154.2	NP_036286.2	1.4	2.5	0.00011	0.0000243	1730	
tensin	WDR18	mwghuman3 OK#B:3546	NM_024100.2	NP_077005.2	1.4	3.2	0.0000511	0.0000582	1748.5	
c-src tyrosine kinase	TNS	mwghuman3 OK#B:8493	NM_022648.2	NP_072174.2	1.3	2.0	0.0000393	0.000177	1753.5	
ubiquitin-conjugating enzyme E2C	CSK	mwghuman3 OK#A:01629	NM_004383.1	NP_004374.1	1.4	1.9	1.05E-06	0.0000107	1935.5	
neuropilin 1	UBE2C	mwghuman3 OK#A:01776	NM_181803.1	NP_861519.1	2.1	8.9	0.001146	0.003908	2155	
	NRP1	mwghuman3 OK#A:03091	NM_003873.2	NP_003864.2	1.9	6.0	0.003291	0.003636	2941	

Fig. 12 (continued)

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control	number	TCC	number
other urological cancer	35	Ta grade 1	9
benign prostate hyperplasia	10	Ta grade 2	28
miscellaneous non malignant urological disease	10	T1 stage 2	4
TCC surveillance (no cancer)	47	Tis stage 1	1
urinary tract infection	21	Tis stage 2	1

Fig. 13

TCC characteristic	Area under curve (%)			
	HoxA13	HoxA13/LTB4DH	IGFBP5	IGFBP5/LTB4DH
Stage Ta (grades 1-2)	64	67	61	70
Stage Ta (grade 1)	66	69	73	81
Grade 1 (all stages)	66	69	73	81
Grade 2 (all stages)	62	62	55	63
Grade 1-2 (all)	64	64	60	68

Fig. 14

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BTM	Overall Sensitivity	stage Ta	grade 1&2	grade 3
cdc2 Hoxa13, MDK	0.61	0.41	0.42	0.86
cdc2, Hoxa13, MDK, LTB4DH	0.63	0.44	0.43	0.89
cdc2 Hoxa13, IGFBP5, MDK	0.61	0.44	0.44	0.82
cdc2 Hoxa13, IGFBP5, MDK, LTB4DH	0.62	0.46	0.45	0.84
cdc2, IGFBP5, MDK	0.61	0.44	0.45	0.82
cdc2, IGFBP5, MDK, LTB4DH	0.62	0.46	0.45	0.85
Hoxa13, IGFBP5, MDK, Top2a	0.61	0.44	0.45	0.83
Hoxa13, IGFBP5, MDK, Top2a, LTB4DH	0.63	0.47	0.46	0.85
Hoxa13, IGFBP5, MDK	0.61	0.44	0.45	0.83
Hoxa13, IGFBP5, MDK, LTB4DH	0.62	0.46	0.45	0.85
HoxA13, MDK	0.62	0.42	0.42	0.87
HoxA13, MDK, LTB4DH	0.64	0.45	0.44	0.89
IGFBP5, MDK	0.62	0.44	0.45	0.84
IGFBP5, MDK, LTB4DH	0.63	0.47	0.45	0.86
cdc2, IGFBP5, MDK, Top2a	0.62	0.45	0.45	0.84
cdc2, IGFBP5, MDK, Top2a, LTB4DH	0.64	0.48	0.46	0.87

Fig. 15