

**Supplementary Table 1. Summary of cluster analysis and transcription factor analysis (unique transcripts)**

Cluster	Affy ID	Symbol	Description	10ppb	40ppb	100ppb	AHRE	ERE
1	Dr.8215.1.A1_at	sox21a	SRY-box containing gene 21a	-2.33	-1.32	-1.00	Y	Y
1	Dr.7110.1.S1_at	zgc:77614	zgc:77059	-3.04	-2.42	-7.29	Y	Y
1	Dr.6147.1.A1_at	zgc:77150	zgc:76913	-2.95	-1.70	-4.17	Y	Y
1	Dr.2978.1.S1_at	vg3	vitellogenin 3, phosphatidylesterase	-6.65	-1.67	-1.79	Y	Y
1	Dr.25593.2.A1_at	wu:fa56g11	wu:fa56g11	-3.90	-1.03	-1.20	Y	Y
1	Dr.25285.1.S1_at	zgc:73223	zgc:73223	-2.47	-1.15	-1.11	Y	Y
1	Dr.25009.4.A1_at	wu:fb59c05	wu:fb59c05	-7.93	-1.73	-2.05	Y	Y
			Kreisler (mouse) maf-related leucine zipper					
1	Dr.23470.1.S1_s_at	krml2.2	homolog 2.2	-3.67	-1.02	-2.68	Y	Y
1	Dr.18893.1.S1_at	im:7138745	im:7138745	-2.73	-1.06	1.01	Y	Y
1	Dr.16681.1.A1_at		NA	-2.17	1.07	1.47	Y	Y
1	Dr.11971.1.A1_at	zgc:92317	zgc:91877	-2.34	-1.06	-1.46	Y	Y
1	Dr.921.1.A1_at	timeless	timeless homolog (Drosophila)	-2.92	1.88	1.07	Y	
1	Dr.8090.1.A1_at	ndrg1l	N-myc downstream regulated gene 1, like procollagen-lysine 1, 2-oxoglutarate 5-	-3.58	1.33	-1.93	Y	
1	Dr.7688.1.A1_at	plod1	dioxygenase 1	-2.24	1.00	-1.43	Y	
1	Dr.25774.1.S1_at		NA	-3.06	-1.59	-1.94	Y	
1	Dr.25498.1.S1_at	bzw1	basic leucine zipper and W2 domains 1	-2.15	1.43	1.18	Y	
1	Dr.25009.6.A1_a_at	vg1	vitellogenin 1	-7.38	-1.62	-1.83	Y	
1	Dr.24920.1.S1_at		NA	-2.56	-1.13	-1.36	Y	
1	Dr.24253.1.S1_at	stk3	serine/threonine kinase 3 (STE20 homolog,	-3.84	1.86	-1.83	Y	
1	Dr.20140.1.A1_at	E2F4	NA	-2.60	-1.64	-1.50	Y	
1	Dr.1991.1.A1_s_at	zgc:66417	zgc:66417	-7.09	-1.19	-5.92	Y	
1	Dr.195.1.S2_at	ck2a1	casein kinase 2 alpha 1	-3.29	-1.04	-1.86	Y	
1	Dr.18466.1.A1_at		NA	-2.23	1.03	-1.56	Y	
1	Dr.17776.1.A1_at	tph1l	tryptophan hydroxylase 1, like	-2.64	-1.53	1.19	Y	
1	Dr.17113.1.A1_a_at	ptena	phosphatase and tensin homolog A	-2.32	1.51	1.38	Y	
1	Dr.13994.2.A1_a_at	zgc:101086	zgc:101086	-2.37	-1.20	-1.67	Y	
1	Dr.13775.1.S1_at		NA	-3.60	-1.20	-1.50	Y	
1	Dr.12714.1.A1_at		NA	-5.65	-1.56	-1.01	Y	
1	Dr.10170.1.A1_at		NA	-2.38	-1.23	-1.64	Y	
1	Dr.4412.13.A1_x_at	wu:fa56g11	wu:fa56g11	-2.92	1.16	-1.13		Y
1	Dr.16504.1.A1_at		NA	-2.60	-1.33	-1.90		Y
1	Dr.16380.1.A1_at	zgc:92068	zgc:86738	-2.45	-1.26	-1.18		Y
1	Dr.4412.12.A1_at	wu:fa56g11	wu:fa56g11	-3.55	-1.05	-1.32		
1	Dr.25593.1.S1_at	wu:fa56g11	wu:fa56g11	-2.80	1.30	1.06		
1	Dr.13096.2.S1_at	zgc:86738	zgc:77882	-3.95	1.18	-1.89		
2	Dr.9682.1.A1_at		NA	-4.11	-4.33	-3.91	Y	Y

**Supplementary Table 1 (cont.). Summary of cluster analysis and transcription factor analysis (unique transcripts)**

Cluster	Affy ID	Symbol	Description	10ppb	40ppb	100ppb	AHRE	ERE
2	Dr.956.1.S1_at	wu:fa92g05	wu:fa92g05	-1.17	-1.36	-2.22	Y	Y
2	Dr.913.1.S1_at	zgc:63909	zgc:63909	-2.60	-1.62	-2.69	Y	Y
2	Dr.8723.1.S1_at	zgc:92903	zgc:92068	-1.21	-1.61	-3.77	Y	Y
2	Dr.7626.1.A1_at	zgc:73257	zgc:73257	-2.25	-1.15	-2.18	Y	Y
2	Dr.7236.1.A1_at	wu:fc31g04	wu:fc31g04	-2.90	-1.25	-2.87	Y	Y
2	Dr.5853.1.A1_at	zgc:77059	zgc:76953	-2.38	-1.03	-1.02	Y	Y
2	Dr.4387.1.S1_at	krt4	keratin 4	-1.96	-2.93	-5.65	Y	Y
2	Dr.4249.1.S1_at	lipf	lipase, gastric	-2.06	-1.85	-2.30	Y	Y
2	Dr.4212.1.S1_at	ldha	lactate dehydrogenase A4	-1.78	-1.45	-2.59	Y	Y
2	Dr.25155.1.S1_s_at	ba1	ba1 globin	-1.11	1.22	-2.50	Y	Y
2	Dr.24233.1.S1_at	fn1b	fibronectin 1b	-1.03	-1.57	-2.69	Y	Y
2	Dr.24122.1.A1_at	zgc:77882	zgc:77614	-2.49	-2.05	-2.06	Y	Y
2	Dr.20722.1.S1_at	zgc:56454	zgc:56454	-2.14	-1.43	-2.95	Y	Y
2	Dr.16206.1.A1_s_at	wu:fo83d04	NA	1.26	1.65	1.23	Y	Y
2	Dr.1619.1.A1_at	wu:fb83a09	wu:fb83a09	-3.44	-1.98	-2.03	Y	Y
2	Dr.15054.1.S1_at	rbp2a	retinol binding protein 2a, cellular	-2.98	-2.39	-4.54	Y	Y
2	Dr.13689.1.S1_at	zgc:66449	zgc:66449	-2.65	-1.76	-1.90	Y	Y
2	Dr.1260.1.S1_at	anxa2a	annexin A2a	-2.42	-2.92	-4.84	Y	Y
2	Dr.12575.1.S1_at	dcp1a	decapping enzyme	-1.12	-1.10	-2.16	Y	Y
2	Dr.10326.1.S1_at	junb	jun B proto-oncogene	-2.21	-1.88	-4.39	Y	Y
2	Dr.890.1.S1_at	zgc:77517	zgc:77150	-2.69	-1.18	-1.53	Y	
2	Dr.8045.1.S1_at	prtfcd1	phosphoribosyl transferase domain containing	-1.44	-1.12	-3.05	Y	
2	Dr.59.1.S1_at	anxa1a	annexin A1a	-2.20	-3.36	-7.06	Y	
2	Dr.3628.1.S1_at	rap1b	RAS related protein 1b	-1.79	-1.41	-2.40	Y	
2	Dr.3512.1.A1_at		NA	-1.86	-1.34	-2.26	Y	
2	Dr.3459.1.S1_at	cd163	Cd63 antigen	-2.04	-1.47	-3.70	Y	
2	Dr.3180.1.A1_at	zgc:76913	zgc:76908	-1.84	-2.40	-2.50	Y	
2	Dr.2363.1.S1_at	tagln2	transgelin 2	-2.93	-2.27	-2.21	Y	
2	Dr.20815.3.A1_at	lgals3l	lectin, galactoside-binding, soluble, 3 (galectin 3)-like	-1.89	-2.68	-2.56	Y	
2	Dr.20277.1.A1_at	acta2	actin, alpha 2, smooth muscle, aorta	-1.83	-1.27	-2.65	Y	
2	Dr.18135.1.A1_at	wu:fl63a03	wu:fl63a03	-1.07	1.07	-4.01	Y	
2	Dr.17850.1.S1_at	zgc:56592	zgc:56592	-2.61	-2.05	-3.41	Y	
2	Dr.15930.1.A1_at		NA	-1.51	-1.03	-2.18	Y	
2	Dr.15856.1.A1_at		NA	-2.66	-1.10	-2.12	Y	
2	Dr.14748.1.S1_at	zgc:63985	zgc:63985	-1.54	-1.52	-2.65	Y	
2	Dr.14041.1.S1_at	zgc:103597	zgc:103597	-2.65	-1.91	-1.97	Y	
2	Dr.1377.1.A1_at	col1a2	collagen, type I, alpha 2	-2.47	-1.44	-2.56	Y	

**Supplementary Table 1 (cont.). Summary of cluster analysis and transcription factor analysis (unique transcripts)**

Cluster	Affy ID	Symbol	Description	10ppb	40ppb	100ppb	AHRE	ERE
2	Dr.1372.1.S1_at	krt18	keratin 18	-1.43	-1.76	-3.09	Y	
2	Dr.1361.1.S1_at	wu:fa98f12	wu:fa98f12	-1.91	-2.41	-4.90	Y	
2	Dr.1282.1.S1_at	krt8	keratin 8	-1.45	-1.89	-3.02	Y	
2	Dr.1246.1.S1_at	apoeb	apolipoprotein Eb	-1.83	-1.09	-4.12	Y	
2	Dr.12106.1.S1_at	lztfl1	leucine zipper transcription factor-like 1	-1.12	-1.12	-2.33	Y	
2	Dr.1201.1.S1_at	zgc:56142	zgc:56142	-2.46	-1.92	-3.71	Y	
2	Dr.11609.1.S1_at	LOC402847		-1.62	-1.54	-2.86	Y	
2	Dr.11348.1.S1_at	zgc:86724	zgc:77517	-3.04	-2.42	-7.29	Y	
2	Dr.10879.1.A1_at	wu:fe14f11	wu:fe14f11	-1.82	-1.12	-2.38	Y	
2	Dr.10314.1.S1_a_at	mmp13	matrix metalloproteinase 13	1.20	1.60	-2.51	Y	
2	AFFX-Dr-GAPDH-3_at						Y	
2	Dr.4048.1.S1_at		NA	-2.15	-1.26	-3.36		Y
2	Dr.2973.1.A1_at		NA	-1.49	-2.39	-1.77		Y
2	Dr.24341.1.S1_at	zgc:76953	zgc:76908	-1.54	-1.10	-2.39		Y
2	Dr.1411.1.S1_at	hbaa1	hemoglobin alpha adult-1	-1.10	1.27	-2.64		Y
			Kreisler (mouse) maf-related leucine zipper					
2	Dr.8198.1.A1_at	krml2	homolog 2	-2.59	-1.19	-2.41		
2	Dr.5809.1.A1_at	wu:fb11g12	wu:fb11g12	-2.30	-1.57	-7.28		
2	Dr.5513.1.S1_at	slc3a2	solute carrier family 3, member 2	-2.35	-1.68	-3.05		
2	Dr.23469.1.S1_s_at	wu:fj17g12	wu:fj17g12	-2.30	-2.50	-2.56		
2	Dr.18880.1.A1_at		NA	-2.05	-1.26	-2.13		
2	Dr.16206.1.A1_at	wu:fo83d04	wu:fo83d04	-1.22	-1.06	-6.09		
2	Dr.13510.1.S1_at	actr10	actin-related protein 10 homolog (S. cerevisiae)	-1.80	-1.23	-2.29		
2	Dr.12498.1.S1_at	rad1	RAD1 homolog (S. pombe)	-1.10	1.13	-2.16		
2	Dr.1194.1.S1_at	zgc:76908	zgc:76908	-2.34	-1.85	-3.53		
3	Dr.8390.1.S1_at	zgc:55420	zgc:55420	3.84	-1.12	1.13	Y	Y
3	Dr.728.4.S1_at	fgb	fibrinogen, B beta polypeptide	5.66	1.43	1.61	Y	Y
3	Dr.6550.1.A1_at	LOC407646		3.05	1.42	-1.09	Y	Y
3	Dr.4797.1.S1_at		NA	8.50	-1.19	1.20	Y	Y
3	Dr.3581.1.S1_at	ctrb1	chymotrypsinogen B1	2.58	1.84	-2.41	Y	Y
3	Dr.3025.3.S1_at	wu:fa04f09	wu:fa04f09	17.52	1.37	2.04	Y	Y
3	Dr.25379.1.S1_at	sb:cb37	sb:cb37	5.19	1.73	1.80	Y	Y
3	Dr.2426.1.S1_at	zgc:66321	zgc:66321	5.00	-1.34	-1.29	Y	Y
			serine (or cysteine) proteinase inhibitor, clade A					
3	Dr.1605.1.S1_at	serpina1	(alpha-1 antiproteinase, antitrypsin), member 1	29.44	1.51	3.07	Y	Y
3	Dr.8587.1.A2_at	igfbp1	insulin-like growth factor binding protein 1	5.58	-1.38	-1.47	Y	
3	Dr.5462.1.S1_at	fgb	fibrinogen, B beta polypeptide	12.80	-1.82	-1.35	Y	
3	Dr.4907.1.S1_at	fgg	fibrinogen, gamma polypeptide	12.96	-1.66	-1.12	Y	

**Supplementary Table 1 (cont.). Summary of cluster analysis and transcription factor analysis (unique transcripts)**

Cluster	Affy ID	Symbol	Description	10ppb	40ppb	100ppb	AHRE	ERE
3	Dr.3613.1.S1_at	cp	ceruloplasmin	24.49	1.06	2.16	Y	
3	Dr.20270.1.S1_at	wu:fi20c07	wu:fi20c07	12.95	-1.13	1.33	Y	
3	Dr.1889.2.A1_a_at	tfa	transferrin-a	11.64	-2.09	-1.32	Y	
3	Dr.5562.1.S1_at	si:ch211-219i10.1	si:ch211-219i10.1	16.55	1.24	1.12		
3	Dr.1889.1.S1_at	tfa	transferrin-a	9.49	-2.25	-1.42		
4	Dr.7806.1.A1_at		NA	-2.44	1.04	2.65	Y	Y
4	Dr.26469.1.S1_at	sp4	sp4 transcription factor	1.51	2.32	1.96	Y	Y
4	Dr.16524.1.S1_at	wu:fc12b04	wu:fc12b04	1.85	2.39	2.05	Y	Y
4	Dr.13972.1.S1_at	zgc:64114	zgc:64114	1.19	2.45	4.16	Y	Y
4	Dr.13182.1.A1_at	rab5b	RAB5B, member RAS oncogene family	2.45	1.34	2.13	Y	Y
4	Dr.12833.1.A1_at	zgc:64213	zgc:64213	-1.62	1.18	3.28	Y	Y
4	Dr.1192.1.S1_at	wu:fb11h03	wu:fb11h03	-1.60	-1.17	3.48	Y	Y
4	Dr.9478.1.S1_at	cyp1a	cytochrome P450, family 1, subfamily A	6.93	14.87	24.68	Y	
4	Dr.9450.1.A1_at	zgc:63724	zgc:63724	-1.46	1.74	3.59	Y	
4	Dr.19990.1.S1_at	zgc:66101	zgc:66101	1.57	1.55	2.43	Y	
4	Dr.19877.1.S1_at	zgc:66133	zgc:66133	1.72	2.17	3.31	Y	
4	Dr.17662.1.S1_at		NA	1.88	3.38	1.62	Y	
4	Dr.15418.1.S1_at	wu:fc23f06	wu:fc23f06	1.26	1.27	3.01	Y	
4	AFFX-Dr-acta1-5_x_at						Y	
4	Dr.24858.1.S1_at	zgc:110540	zgc:110540	1.37	2.56	1.97		
4	Dr.15555.1.S1_at		NA	1.48	2.58	2.72		
4	Dr.1192.1.S1_a_at	wu:fb11h03	wu:fb11h03	-2.96	-1.56	2.95		
5	Dr.26139.1.A1_x_at	NA	NA	1.36	2.17	-1.07	Y	Y
5	Dr.25378.1.A1_at	zgc:110540	zgc:110540	1.64	2.32	1.48	Y	Y
5	Dr.24249.1.S1_at	zc3hdc5	zinc finger CCCH type domain containing 5	1.60	1.54	1.02	Y	Y
5	Dr.5002.1.A1_at	NA	NA	1.74	2.33	1.78	Y	
5	Dr.25086.1.A1_at	NA	NA	1.43	1.30	1.03	Y	
5	Dr.1368.7.S1_at	zgc:86724	zgc:86724	1.26	1.38	1.30	Y	