

**Table S2: Human transcripts that are homologous to zebrafish transcripts represented by Affymetrix probe sets differentially expressed in CONVD compared to GF zebrafish larvae at 6dpf**

Zebrafish probe set ID <sup>a</sup>	Fold-difference <sup>b</sup>	Human gene accession <sup>c</sup>	Human gene name <sup>c</sup>	Human gene symbol <sup>c</sup>
AFFX-Dr-NM_131175-1_s_at	0.53	NM_020061 NM_000513 NM_001048181	opsin 1 (cone pigments), long-wave-sensitive opsin 1 (cone pigments), medium-wave-sensitive opsin 1 (cone pigments), medium-wave-sensitive 2	OPN1LW OPN1MW OPN1MW2
Dr.10250.1.A1_at	1.96	AJ301562	L-threonine dehydrogenase	TDH
Dr.10314.1.S1_a_at	5.05	X75308	matrix metalloproteinase 13	MMP13
Dr.10345.1.A1_at	1.58	--	--	--
Dr.10376.1.S1_at	2.87	NM_032488	cornifelin	CNFN
Dr.10624.1.S1_at	2.85	BC021683	peroxiredoxin 1	PRDX1
Dr.10713.1.S1_at	1.65	NM_000701	ATPase, Na+/K+ transporting, alpha 1	ATP1A1
Dr.10728.1.S1_at	1.65	BC005278	glucagon	GCG
Dr.1082.1.S1_at	1.60	AY151286	prostaglandin-endoperoxide synthase 2	PTGS2
Dr.11252.1.A1_at	0.57	BC029140	creatine kinase, mitochondrial 2 (sarcomeric)	CKMT2
Dr.11290.1.A1_at	1.86	BC015089	midnolin	MIDN
Dr.11305.1.A1_at	0.44	BC006249	guanylate kinase 1	GUK1
Dr.11310.3.S1_at	0.57	NM_006009	tubulin, alpha 3	TUBA3
Dr.12241.1.A1_at	0.38	NM_004377	carnitine palmitoyltransferase 1B (muscle)	CPT1B
Dr.12369.1.A1_at	1.67	BC034694	sulfotransferase family, cytosolic, 2B, member 1	SULT2B1
Dr.12399.1.S1_at	2.04	M74178	macrophage stimulating 1 (hepatocyte growth factor-like)	MST1
Dr.12478.1.S1_at	0.57	--	--	--
Dr.12491.1.A1_at	4.90	NM_000592 NM_007293	complement component 4B complement component 4A	C4B C4A
Dr.1254.1.A1_at	0.52	NM_000393	collagen, type V, alpha 2	COL5A2
Dr.1259.1.A1_at	1.54	BC018127	peptidyl-glycine alpha-amidating monooxygenase	PAM
Dr.12596.1.S1_at	1.51	BC065830	claudin 9	CLDN9
Dr.12725.1.A1_at	2.50	NM_024636	STEAP family member 4	STEAP4
Dr.12733.1.A1_at	0.52	NM_017781	cytochrome P450, family 2, subfamily W, polypeptide 1	CYP2W1
Dr.12770.1.S1_at	2.50	--	--	--
Dr.1280.1.A1_at	2.40	M83667	CCAAT/enhancer binding protein (C/EBP), delta	CEBDP
Dr.1280.1.A2_at	2.20	M83667	CCAAT/enhancer binding protein (C/EBP), delta	CEBDP
Dr.12817.1.A1_at	0.35	AF202636	angiopoietin-like 4	ANGPTL4
Dr.13114.1.A1_at	0.66	AF211836	ras homolog gene family, member U	ARHU
Dr.13131.1.S1_at	8.96	BC007022 NM_030754 NM_006512	serum amyloid A1 serum amyloid A2 serum amyloid A4	SAA1 SAA2 SAA4
Dr.1368.4.A1_at	1.62	--	--	--
Dr.1372.1.S1_at	1.56	NM_000224	keratin 18	KRT18
Dr.13972.1.S1_at	3.25	AL136668	Hypothetical protein	DDIT4
Dr.14396.1.A1_at	1.54	L21998	mucin 2, intestinal/tracheal	MUC2
Dr.14415.1.A1_at	1.76	NM_001007527	LMBR1 domain containing 2	LMBRD2
Dr.14719.1.A1_at	0.17	NM_001024228	ADP-ribosylation factor 1	ARF1
Dr.148.1.A1_at	1.74	--	--	--
Dr.14944.1.A1_at	1.82	NM_005923	mitogen-activated protein kinase kinase kinase 5	MAP3K5
Dr.14963.1.A1_at	2.00	AB015628 BC012621 NM_207390 NM_014358	C-type lectin, superfamily member 2 (activation-induced) killer cell lectin-like receptor subfamily G, member 1 C-type lectin domain family 17, member A C-type lectin domain family 4, member E	CLECSF2 KLRG1 CLEC17A CLEC4E
Dr.15004.1.A1_at	1.77	--	--	--
Dr.15054.1.S1_at	0.62	U13831	retinol binding protein 2, cellular	RBP2
Dr.15281.1.A1_at	4.89	S48568	tissue inhibitor of metalloproteinase 2	TIMP2
Dr.15382.1.A1_at	1.54	--	--	--
Dr.15644.1.A1_at	1.54	--	--	--
Dr.15687.2.S1_a_at	0.56	L26050	2,4-dienoyl CoA reductase 1, mitochondrial	DECR1
Dr.15733.1.S1_at	0.59	--	--	--
Dr.15942.1.S1_at	2.41	NM_003963	transmembrane 4 L six family member 5	TM4SF5
Dr.1605.1.S1_at	1.70	NM_000295	serine proteinase inhibitor, clade A , member 1	SERPINA1
Dr.16053.1.S1_at	0.66	NM_001945	heparin-binding EGF-like growth factor	HBEGF
Dr.16095.1.S1_at	1.93	CR595377	insulin-like growth factor binding protein 1	IGFBP1
Dr.16229.1.A1_at	0.64	--	--	--
Dr.16257.1.A1_at	0.64	--	--	--
Dr.16372.1.A1_at	0.52	NM_016532	inositol polyphosphate-5-phosphatase K	INPP5K
Dr.16392.1.A1_at	2.36	BC035723	complement component 6	C6
Dr.1659.1.A1_at	1.62	--	--	--
Dr.16609.2.A1_at	0.65	NM_138467	tRNA- $\gamma$ W synthesizing protein 3 homolog (S. cerevisiae)	TYW3
Dr.17437.1.S1_at	2.25	AF326976	C1q and tumor necrosis factor related protein 3	C1QTNF3
Dr.17438.1.S1_at	1.92	NM_052864	TRAF-interacting protein with a forkhead-associated domain	TIFA
Dr.17459.1.S1_a_at	1.62	NM_002218	inter-alpha (globulin) inhibitor H4	ITIH4
Dr.17470.1.S1_at	2.87	NM_001002036	astacin-like metallo-endopeptidase (M12 family)	ASTL
Dr.17493.1.S1_s_at	0.58	--	--	--
Dr.17570.2.A1_at	1.64	AF237775	MAP kinase interacting serine/threonine kinase 2	MKNK2
Dr.17591.1.S1_at	4.19	NM_001008223	complement component 1, q subcomponent-like 4	C1QL4

Dr.17761.1.S1_at	2.06	X14787	thrombospondin 1	THBS1
Dr.18429.1.A1_at	3.04	M16967	coagulation factor V (proaccelerin, labile factor)	F5
Dr.18459.1.S1_at	0.47	NR_001296	trypsinogen C (TRY6) on chromosome 7	TRY6
Dr.18599.1.S1_at	0.60	AY052783	Protease serine 4 isoform B	AY052783
Dr.18756.1.S1_at	24.19	BC022489	fatty acid binding protein 6, ileal (gastrotrypin)	FABP6
Dr.18812.1.S1_at	1.51	--	--	--
Dr.18834.1.S1_at	1.91	X90824	upstream transcription factor 2, c-fos interacting	USF2
Dr.18835.2.S1_at	6.41	XR_018102	similar to Uricase (Urate oxidase)	LOC391051
Dr.1889.1.S1_at	1.78	NR_003927	urate oxidase (pseudogene)	UOX
Dr.1889.2.A1_a_at	2.60	BC062415	Microfibrillar-associated protein 4	MFAP4
Dr.190.1.S1_at	5.06	NM_001063	transferrin	TF
Dr.19560.1.S1_at	1.69	X53961	lactotransferrin	LTF
Dr.19799.1.A1_at	2.63	NM_001063	transferrin	TF
Dr.19902.1.S1_at	1.96	X53961	lactotransferrin	LTF
Dr.20030.1.S1_at	2.29	BC11992	complement factor B	CFB
Dr.20185.1.S1_at	2.04	M15856	insulin induced gene 1	INSIG1
Dr.20270.1.S1_at	2.31	BC020766	lipin 1	LPIN1
Dr.20291.1.A1_at	4.09	K02765	cathepsin L1	CTSL1
Dr.2045.1.A1_at	0.66	NM_005327	cathepsin L2	CTSL2
Dr.20479.1.S1_at	1.81	AB018551	melanocortin 4 receptor	MC4R
Dr.20821.1.A1_at	2.06	X05199	lipoprotein lipase	LPL
Dr.21005.1.S1_s_at	5.88	K02765	C-reactive protein, pentraxin-related	CRP
Dr.21859.1.A1_at	0.61	NM_173502	complement component 3	C3
Dr.2188.1.S1_at	0.56	NM_002773	hydroxyacyl-Coenzyme A dehydrogenase (HADH), nuclear gene encoding mitochondrial protein	HADH
Dr.22129.1.A1_at	2.48	L34041	chromosome 16 open reading frame 7	C16orf7
Dr.22133.1.S1_at	1.97	NM_022157	plasminogen	PLG
Dr.22145.1.A1_at	3.48	--	complement component 3	C3
Dr.22217.1.A1_at	3.09	NM_002113	protease, serine, 36	PRSS36
Dr.22629.1.A1_x_at	1.52	--	protease, serine, 8	PRSS8
Dr.23038.1.A1_at	0.57	--	glycerol-3-phosphate dehydrogenase 1 (soluble)	GPD1
Dr.23512.1.A1_at	2.33	--	Ras-related GTP binding C	RRAGC
Dr.23526.1.A1_at	0.66	NM_014021	--	--
Dr.23731.1.A1_at	4.33	K02765	complement factor B	CFB
Dr.23886.1.A1_at	1.53	NM_012445	complement factor H-related 1	CFHL1
Dr.24261.1.S1_at	0.52	NM_001443	--	--
Dr.24284.1.A1_at	0.63	NM_002091	--	--
Dr.24483.1.S1_at	1.68	--	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha	IKBA
Dr.24507.1.S1_at	1.91	BC002601	complement component 9	C9
Dr.2452.1.A1_at	2.86	NM_001737	complement component 9	C9
Dr.2452.2.A1_a_at	3.11	NM_001737	complement component 9	C9
Dr.2452.2.A1_x_at	2.93	NM_001737	--	--
Dr.24729.1.S1_x_at	1.67	--	signal recognition particle 68kDa	SRP68
Dr.25133.5.A1_at	1.52	BC020238	hemoglobin, beta	HBB
Dr.25155.1.S1_s_at	1.75	BC007075	hemoglobin, delta	HBD
Dr.25195.1.S1_at	4.80	AY034468	hemoglobin gamma-G (Fragment)	HBG2
Dr.25214.1.A1_at	1.64	M15386	hemoglobin, gamma A	HBG1
Dr.25219.1.A1_at	1.92	BC020719	hemoglobin, epsilon 1	HBE1
Dr.25219.1.A1_at	1.92	BC015537	Hypothetical protein LOC129138	LOC129138
Dr.25219.1.A1_at	1.92	BC066909	cytochrome P450, family 24, subfamily A, polypeptide 1	CYP24A1
Dr.25219.1.A1_at	1.92	L13286	tryptase beta 1	TPSB1
Dr.25219.1.A1_at	1.92	M33491	CDNA FLJ16046 fis, clone CTONG2013178, weakly	AK122625
Dr.25219.1.A1_at	1.92	AK122625	similar to Homo sapiens serine protease DESC1 (DESC1) mRNA	
Dr.25442.1.A1_at	0.50	AK075142	Polyserape-2 precursor (EC 3.4.21.-) (Polyserine protease-2)	AK075142
Dr.25449.1.A1_at	1.82	BC041609	Similar to distal intestinal serine protease	BC041609
Dr.25727.1.A1_at	1.62	U75329	transmembrane protease, serine 2	TMPRSS2
Dr.25727.1.A1_at	1.62	AF216312	transmembrane protease, serine 4	TMPRSS4
Dr.25727.1.A1_at	1.62	AY358458	ECHOS1	AY358458
Dr.25727.1.A1_at	1.62	U09860	protease, serine, 7 (enterokinase)	PRSS7
Dr.25727.1.A1_at	1.62	BC029356	tryptase beta 2	TPSB2
Dr.25727.1.A1_at	1.62	NM_001907	chymotrypsin-like	CTRL
Dr.25727.1.A1_at	1.62	AY037298	elongation of very long chain fatty acids (FEN1/Elo2, SUR4/Elo3, yeast)-like 4	ELOVL4
Dr.25727.1.A1_at	1.62	AB042823	RecQ protein-like 5	RECQL5
Dr.25727.1.A1_at	1.62	BC031574	mitogen-activated protein kinase 14	MAPK14

Dr.25944.1.A1_at	1.77	--		
Dr.26268.1.A1_at	1.91	NM_006770	macrophage receptor with collagenous structure	MARCO
Dr.26324.1.A1_at	1.59	NM_032501	acyl-CoA synthetase short-chain family member 1 (ACSS1), nuclear gene encoding mitochondrial protein	ACSS1
Dr.26381.1.A1_at	0.65	NM_006082	tubulin, alpha 1b	TUBA1B
		BC011721	tubulin, alpha 2	TUBA2
Dr.26478.1.S1_at	1.60	BC035058	protein kinase, cAMP-dependent, catalytic, beta	PRKACB
Dr.26483.1.S1_at	1.85	NM_014584	ERO1-like	ERO1L
Dr.2655.1.S1_at	2.32	U70136	proteoglycan 4, (megakaryocyte stimulating factor, articular superficial zone protein, camptodactyly, arthropathy, coxa vara, pericarditis syndrome)	PRG4
Dr.2829.1.A1_at	1.68	--		--
Dr.2960.1.A1_at	1.59	NM_002218	inter-alpha (globulin) inhibitor H4	ITIH4
Dr.2973.1.A1_at	2.99	BC002816	neutrophil cytosolic factor 1 (47kDa, chronic granulomatous disease, autosomal 1)	NCF1
Dr.2999.1.S1_at	1.99	NM_002727	serglycin	SRGN
Dr.3238.1.A1_at	0.41	NM_003597	Kruppel-like factor 11	KLF11
Dr.3444.2.S1_at	2.33	BC100883	Lysozyme g-like protein 2 precursor	LYG2
Dr.3521.1.A1_at	0.63	--		--
Dr.3563.2.S1_at	1.52	NM_004617	Transmembrane 4 superfamily member 4	TM4SF4
Dr.3585.1.S1_at	5.97	BT006851	Angiotensinogen	AGT
Dr.360.1.A1_at	1.69	AL110209	lysophospholipase 3 (lysosomal phospholipase A2)	LYPLA3
Dr.3645.1.S1_at	1.98	X05199	plasminogen	PLG
Dr.3789.1.A1_at	1.60	AB037669	solute carrier family 7 (cationic amino acid transporter, y+ system), member 8	SLC7A8
Dr.3804.2.A1_a_at	1.50	NM_012463	ATPase, H <sup>+</sup> transporting, lysosomal V0 subunit a2	ATP6V0A2
		U45285	T-cell, immune regulator 1, ATPase, H <sup>+</sup> transporting, lysosomal V0 protein a isoform 3	TCIRG1
Dr.4060.1.S1_at	0.59	D16481	hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl- Coenzyme A thiolase/enoyl-Coenzyme A hydratase (trifunctional protein), beta subunit	HADHB
Dr.4103.1.A1_at	1.91	NM_000186	complement factor H	CFH
		BC022283	H factor (complement)-like 3	HFL3
Dr.4654.1.A1_at	1.69	NM_014330	protein phosphatase 1, regulatory (inhibitor) subunit 15A	PPP1R15A
Dr.4654.2.S1_a_at	1.62	NM_014330	protein phosphatase 1, regulatory (inhibitor) subunit 15A	PPP1R15A
Dr.4654.2.S1_at	1.77	NM_014330	protein phosphatase 1, regulatory (inhibitor) subunit 15A	PPP1R15A
Dr.467.1.A1_at	0.56	BX538129	electron-transferring-flavoprotein dehydrogenase	ETFDH
Dr.4676.1.A1_at	3.14	--		--
Dr.4748.1.S1_at	1.77	BT006844	granulin	GRN
Dr.4863.1.A1_at	5.97	XM_939359	similar to apical early endosomal glycoprotein	LOC650269
Dr.4863.2.S1_at	4.92	XM_939359	similar to apical early endosomal glycoprotein	LOC650269
Dr.4868.1.A1_at	1.70	--		--
Dr.4907.1.S1_at	2.02	NM_021870	fibrinogen, gamma polypeptide	FGG
Dr.4937.1.A1_at	3.50	NM_004406	deleted in malignant brain tumors 1 isoform a	DMBT1
Dr.4957.1.S1_at	1.69	BC017197	Myeloid cell differentiation protein (Myeloid cell leukemia protein 1) (Myeloid cell leukemia sequence 1) (BCL2- related)	MCL1
Dr.5356.1.A1_at	2.24	NM_022153	chromosome 10 open reading frame 54 (platelet receptor GI24)	C10orf54
Dr.5461.1.A1_at	2.85	NM_001861	cytochrome c oxidase subunit IV isoform 1	COX4I1
		AF257180	cytochrome c oxidase subunit IV isoform 2	COX4I2
Dr.5462.1.S1_at	2.60	J00129	fibrinogen, B beta polypeptide	FGB
Dr.548.1.S1_at	0.65	NM_001003745	olfactory receptor, family 10, subfamily A,	OR10A3
		NM_001005285	olfactory receptor, family 2, subfamily AT, member 4	OR2AT4
Dr.5573.1.S1_at	1.82	NM_138450	ADP-ribosylation factor-like 11	ARL11
Dr.558.1.S1_at	0.63	NM_014588	visual system homeobox 1 homolog	VSX1
Dr.6064.1.A1_at	1.51	L21998	mucin 2, intestinal/tracheal	MUC2
Dr.6143.1.A1_at	0.43	NM_003986	butyrobetaine (gamma), 2-oxoglutarate dioxygenase	BBOX1
Dr.6431.1.S1_at	3.66	AF159854	suppressor of cytokine signaling 3	SOCS3
Dr.6531.2.S1_at	1.55	NM_003745	suppressor of cytokine signaling 1	SOCS1
Dr.6575.1.S1_at	2.06	BC021931	CCAAT/enhancer binding protein (C/EBP), beta	CEPB
Dr.6604.2.A1_a_at	1.61	BX537399	protein phosphatase 1, regulatory (inhibitor) subunit 3C	PPP1R3C
Dr.681.1.A1_at	1.51	NM_016084	RAS, dexamethasone-induced 1	RASD1
Dr.6845.1.S1_at	3.12	K02765	complement component 3	C3
Dr.6928.3.S1_at	0.63	M16447	quinoid dihydropteridine reductase	QDPR
Dr.7343.1.S1_at	0.66	AF251043	acyl-Coenzyme A dehydrogenase, C-4 to C-12 straight chain	ACADM
Dr.7365.1.A1_at	1.99	AF165281	ATP-binding cassette, sub-family A (ABC1), member 1	ABCA1
Dr.7368.1.A1_at	2.54	BC002601	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha	IKBA
Dr.737.1.A1_at	1.65	BC004250	jun B proto-oncogene	JUNB
Dr.765.1.A1_at	0.43	NM_000182	hydroxyacyl-Coenzyme A dehydrogenase/3-ketoacyl- Coenzyme A thiolase/enoyl-Coenzyme A hydratase (trifunctional protein), alpha subunit	HADHA
Dr.7722.1.A1_at	5.53	K02765	complement component 3	C3

Dr.7853.1.A1_at	0.60	AB002323	dynein, cytoplasmic, heavy polypeptide 1	DNCH1
Dr.7977.1.S1_at	1.59	NM_000581	glutathione peroxidase 1	GPX1
		X53463	glutathione peroxidase 2 (gastrointestinal)	GPX2
Dr.8000.1.S1_at	3.29	NM_000581	glutathione peroxidase 1	GPX1
		X53463	glutathione peroxidase 2 (gastrointestinal)	GPX2
Dr.8014.1.S1_at	1.57	X61123	B-cell translocation gene 1, anti-proliferative	BTG1
Dr.8090.1.A1_at	2.86	BC003175	N-myc downstream regulated gene 1	NDRG1
Dr.8097.1.S1_at	0.63	NM_000539	rhodopsin	RHO
Dr.8102.1.S1_at	0.55	NM_000539	rhodopsin	RHO
Dr.8109.1.S1_at	2.17	AK223305	lymphocyte cytosolic protein 1 (L-plastin)	LCP1
Dr.8143.1.S1_at	0.45	NM_000134	intestinal fatty acid binding protein 2	FABP2
Dr.8153.1.S1_at	0.46	BC000671	claudin 4	CLDN4
Dr.827.1.A1_at	2.08	AF201077	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 4, 9kDa	NDUFA4
Dr.845.1.A1_at	2.23	J00128	fibrinogen, A alpha polypeptide	FGA
Dr.8587.1.A1_at	1.90	NM_000596	insulin-like growth factor binding protein 1	IGFBP1
Dr.8587.1.A2_at	1.86	NM_000596	insulin-like growth factor binding protein 1	IGFBP1
Dr.8591.1.A1_at	9.04	NM_000613	hemopexin	HPX
Dr.8654.2.A1_a_at	0.66	NM_001788	septin 7	SEPT7
Dr.8723.1.S1_at	2.29	BC003377	thioredoxin	TXN
Dr.9288.1.S1_at	1.54	NM_000612	insulin-like growth factor 2 (somatomedin A)	IGF2
Dr.9448.1.A1_at	0.24	NM_003597	Kruppel-like factor 11	KLF11
Dr.9457.1.A1_at	2.85	AK025273	egl nine homolog 3 (C. elegans)	EGLN3
Dr.9478.1.S1_at	2.15	BC023019	cytochrome P450, family 1, subfamily A, polypeptide 1	CYP1A1
Dr.9478.3.S1_a_at	8.01	NM_000250	myeloperoxidase	MPO
		X14346	eosinophil peroxidase	EPX
Dr.9492.1.A1_at	1.54	BC016836	sulfide quinone reductase-like (yeast)	SQRDL
Dr.9515.1.A1_at	1.96	AF495470	coronin, actin binding protein, 1A	CORO1A
Dr.956.1.S1_at	1.66	NM_001863	cytochrome c oxidase subunit VIb	COX6B1
Dr.96.1.A1_at	1.53	BC063851	Complement component 7	C7
Dr.9617.1.A1_at	2.09	AF159854	suppressor of cytokine signaling 3	SOCS3
Dr.9665.1.S1_at	1.59	NM_001665	ras homolog gene family, member G	RHOG
Dr.967.1.S1_at	7.17	BC006093	matrix metalloproteinase 9	MMP9
Dr.9876.1.S1_at	0.47	BC008663	guanine nucleotide binding protein (G protein), gamma transducing activity polypeptide 2	GNGT2
Dr.9890.1.A1_at	1.54	--	--	--
DrAффx.1.32.S1_at	2.08	BT007245	Transforming growth factor, beta 1 (Camurati-Engelmann disease)	TGFB1
DrAффx.2.58.A1_at	1.83	NM_000782	cytochrome P450, family 24, subfamily A, polypeptide 1	CYP24A1

<sup>a</sup> Affymetrix probe set IDs representing zebrafish transcripts differentially expressed in CONVD versus GF zebrafish larvae at 6dpf.

<sup>b</sup> Fold difference of transcript level in 6dpf zebrafish larvae is shown as CONVD/GF.

<sup>c</sup> Homologous human transcripts identified using existing databases (<http://zfbblast1.danio.tchlab.org/zgMap/> and {Stuckenholz, 2009}) as well as manual annotation. If a probe set represents a zebrafish transcript with multiple human homologs, those homologous human genes are listed separately. Only the top human homolog for each probe set was included in the IPA functional categorization.