

**Genome-wide identification of thyroid hormone receptor targets in the  
remodeling intestine during *Xenopus tropicalis* metamorphosis**

Liezhen Fu, Biswajit Das, Kazuo Matsuura, Kenta Fujimoto, Rachel A. Heimeier,  
and Yun-Bo Shi

Section on Molecular Morphogenesis, Eunice Kennedy Shriver National Institute of  
Child Health and Human Development (NICHD), National Institutes of Health (NIH),  
Bethesda, Maryland, 20892

**\*Corresponding Authors:** Yun-Bo Shi, [Shi@helix.nih.gov](mailto:Shi@helix.nih.gov)

Supplemental Table 1. Genes bound by TR in the intestine and its regulation during development

ENSEMBLE ID	Peak signal	Peak position	Gene ID	Bound by TR in	Regulated during development in*	Gene Description
ENSKETG00000000089	0.815343925	5946	acy1.1	T3-treatment		aminoacylase 1, gene 1 [Source:Jamboree;Acc:XB-GENE-972681]
ENSKETG00000000161	0.66053772	5946	sae1	T3-treatment		SUMO1 activating enzyme subunit 1 [Source:Jamboree;Acc:XB-GENE-923356]
ENSKETG00000000254	0.572419037	5536	gtdc1	Control		glycosyltransferase-like domain containing 1 [Source:Jamboree;Acc:XB-GENE-1004420]
ENSKETG00000000559	0.968453088	5536	rcttb2	T3-treatment		regulator of chromosome condensation (RCC1) and BTB (POZ) domain containing protein 2 [Source:Jamboree;Acc:XB-GENE-952598]
ENSKETG00000000572	1.511153686	5126	acrv1b	T3-treatment	Both EP & Non-EP	activin A receptor, type IB [Source:Jamboree;Acc:XB-GENE-483904]
ENSKETG00000000579	0.716015803	411	nr4a1	T3-treatment		nuclear receptor subfamily 4, group A, member 1 [Source:Jamboree;Acc:XB-GENE-483315]
ENSKETG00000000804	0.575752145	4511	nfl3	Control	Both EP & Non-EP	nuclear factor, interleukin 3 regulated [Source:Jamboree;Acc:XB-GENE-479624]
ENSKETG00000000835	0.589051682	821	nfib	T3-treatment		nuclear factor I/B [Source:Jamboree;Acc:XB-GENE-486376]
ENSKETG00000001582	0.679877262	2666	spata5	Control		spermatogenesis associated 5 [Source:Jamboree;Acc:XB-GENE-6054426]
ENSKETG00000001921	0.728222458	2666	setd1a	T3-treatment		SET domain containing 1A [Source:Jamboree;Acc:XB-GENE-6046043]
ENSKETG00000001957	0.64693736	5671	cul4a	T3-treatment		cullin 4A [Source:Jamboree;Acc:XB-GENE-1014775]
ENSKETG00000002040	0.713648802	2461	myo19	T3-treatment		myosin XIV [Source:Jamboree;Acc:XB-GENE-999897]
ENSKETG00000002271	0.576996686	5741	ranbp9	T3-treatment		RAN binding protein 9 [Source:Jamboree;Acc:XB-GENE-494852]
ENSKETG00000002589	0.727347698	6151	rhou	T3-treatment		ras homolog gene family, member U [Source:Jamboree;Acc:XB-GENE-491190]
ENSKETG00000002643	0.67719223	6356	zmym2	T3-treatment		zinc finger, MYM-type 2 [Source:Jamboree;Acc:XB-GENE-961591]
ENSKETG00000002746	0.583056381	5331	ppm1b	Both		protein phosphatase, Mg <sup>2+</sup> /Mn <sup>2+</sup> -dependent, 1B [Source:Jamboree;Acc:XB-GENE-999170]
ENSKETG00000002843	0.72473583	5741	XB-GENE-992854	T3-treatment		Putative ortholog of galectin-4 (Lactose-binding lectin) (L36LBP), 1 of 1 [Source:Jamboree;Acc:XB-GENE-992854]
ENSKETG00000002899	0.633070368	1026	zfp36	T3-treatment		zinc finger protein 36, C3H type, homolog [Source:Jamboree;Acc:XB-GENE-991815]
ENSKETG00000003127	0.642328265	616	ikzf2	T3-treatment		IKAROS family zinc finger 2 (Helios) [Source:Jamboree;Acc:XB-GENE-1013632]
ENSKETG00000003144	0.824862277	1846	gata6	T3-treatment		GATA binding protein 6 [Source:Jamboree;Acc:XB-GENE-485063]
ENSKETG00000003160	0.751999685	411	dlp	T3-treatment		D site of albumin promoter (albumin D-box) binding protein [Source:Jamboree;Acc:XB-GENE-5995286]
ENSKETG00000003203	0.82465633	538	hadhb	T3-treatment		hydroxyl-CoA dehydrogenase 3-ketoacyl-CoA thiolase/enoyl-CoA hydratase (trifunctional protein), beta subunit [Source:Jamboree;Acc:XB-GENE-1009673]
ENSKETG00000003291	0.593119427	5331	polr2e	T3-treatment		polymerase (RNA) II (DNA directed) polypeptide E, 25kDa [Source:Jamboree;Acc:XB-GENE-1005304]
ENSKETG00000003440	0.600161789	1846	apk9	T3-treatment		A kinase (PRKA) anchor protein (yotiao) 9 [Source:Jamboree;Acc:XB-GENE-9953770]
ENSKETG00000003506	1.152658914	5536	urod	T3-treatment		uroporphyrinogen decarboxylase [Source:Jamboree;Acc:XB-GENE-948493]
ENSKETG00000003539	0.770937274	2461	dydc1	T3-treatment		DPY30 domain containing 1 [Source:Jamboree;Acc:XB-GENE-6258872]
ENSKETG00000003760	0.959061959	821	setd1b	T3-treatment		SET domain containing 1B [Source:Jamboree;Acc:XB-GENE-5842344]
ENSKETG00000004036	0.776047649	4013	ctu1	T3-treatment		cytosolic thiouridylate synthetase 1 homolog [Source:Jamboree;Acc:XB-GENE-5872210]
ENSKETG00000004145	0.780703766	5741	cyp20a1	T3-treatment		cytochrome P450, family 20, subfamily A, polypeptide 1 [Source:Jamboree;Acc:XB-GENE-988532]
ENSKETG00000004226	0.890489097	2666		T3-treatment		
ENSKETG00000004328	0.927936434	5126	commd5	Both		COMM domain containing 5 [Source:Jamboree;Acc:XB-GENE-952087]
ENSKETG00000004343	0.63553975	3896	slc25a43	T3-treatment		solute carrier family 25, member 43 [Source:Jamboree;Acc:XB-GENE-6258507]
ENSKETG00000004766	0.669806752	1846	junb	T3-treatment		jun B proto-oncogene [Source:Jamboree;Acc:XB-GENE-945864]
ENSKETG00000005251	0.727856369	5455	tor2a	Both		torsin family 2, member A [Source:Jamboree;Acc:XB-GENE-5806617]
ENSKETG00000005358	0.637732736	2384		T3-treatment		Uncharacterized protein [Source:UniProtKB/TremBL;Acc:F6QEY1]
ENSKETG00000005387	0.812597399	5536	pm20d2	Both		peptidase M20 domain containing 2 [Source:Jamboree;Acc:XB-GENE-969482]
ENSKETG00000005620	1.672538267	1231	LONRF1	Both		LON peptidase N-terminal domain and ring finger 1 [Source:HGNC Symbol;Acc:HGNC-26302]
ENSKETG00000005659	0.703968978	5331	impad1	T3-treatment		inositol monophosphatase domain containing 1 [Source:Jamboree;Acc:XB-GENE-5751033]
ENSKETG00000005781	0.701557582	411	btg3	T3-treatment		BTG family, member 3 [Source:Jamboree;Acc:XB-GENE-995111]
ENSKETG00000005902	0.797768876	2666	prtfcd1	Both	Non-EP	phosphorybosyl transferase domain containing 1 [Source:Jamboree;Acc:XB-GENE-942165]
ENSKETG00000005922	0.692352065	5946	hpb1	T3-treatment	Both EP & Non-EP	HMG-box transcription factor 1 [Source:Jamboree;Acc:XB-GENE-950343]
ENSKETG00000006353	0.704717104	3486	pla2g6	T3-treatment		phospholipase A2, group 6 (cytosolic, calcium-independent) [Source:Jamboree;Acc:XB-GENE-920447]
ENSKETG00000006354	0.812978453	5536	kiaa1370	T3-treatment		KIAA1370 [Source:Jamboree;Acc:XB-GENE-5816685]
ENSKETG00000006455	0.614311642	2051	camk2g	T3-treatment	Non-EP	calcium/calmodulin-dependent protein kinase (CaM kinase) II gamma [Source:Jamboree;Acc:XB-GENE-868520]
ENSKETG00000006575	0.698282027	5536	zfnf420	Control		zinc finger protein 420 [Source:Jamboree;Acc:XB-GENE-5724906]
ENSKETG00000006612	0.57694666	821	asah2	T3-treatment		N-acetylsphingosine amidohydrolase (non-lysosomal ceramidease) 2 [Source:Jamboree;Acc:XB-GENE-1003068]
ENSKETG00000006614	1.508829842	1026	sgms1	T3-treatment		sphingomyelin synthase 1 [Source:Jamboree;Acc:XB-GENE-986773]
ENSKETG00000006633	0.888552066	411	znf706	T3-treatment		zinc finger protein 706 [Source:Jamboree;Acc:XB-GENE-980122]
ENSKETG00000006658	0.609945757	3281	dpy19l4	T3-treatment		dpy-19-like 4 [Source:Jamboree;Acc:XB-GENE-6034528]
ENSKETG00000006692	0.624332706	5946		Both		
ENSKETG000000066970	0.696381336	4716	jup	T3-treatment	Non-EP	junction plakoglobin [Source:Jamboree;Acc:XB-GENE-489397]
ENSKETG00000006690	1.434873376	411		Both		
ENSKETG00000006693	0.760743505	7278		Both		
ENSKETG00000007013	0.867530501	5331	klf11	T3-treatment	EP	Kruppel-like factor 11 [Source:Jamboree;Acc:XB-GENE-956858]
ENSKETG00000007026	1.579606243	5536	prkaa1	T3-treatment		protein kinase, AMP-activated, alpha 1 catalytic subunit [Source:Jamboree;Acc:XB-GENE-946195]
ENSKETG00000007020	0.664909868	1641	agh1	T3-treatment		hydroxyacylglutathione hydrolase-like [Source:Jamboree;Acc:XB-GENE-987560]
ENSKETG00000007220	0.748116237	5126	rps2	T3-treatment		ribosomal protein S2 [Source:Jamboree;Acc:XB-GENE-1003616]
ENSKETG00000007319	1.198831016	5741	c20orf3	T3-treatment		chromosome 20 open reading frame 3 [Source:Jamboree;Acc:XB-GENE-5754317]
ENSKETG00000007320	0.750346854	6356	sema3b	T3-treatment		sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (Semaphorin) 3B [Source:Jamboree;Acc:XB-GENE-921561]
ENSKETG00000007329	0.733347816	4921	hyal1	T3-treatment		hyaluronoglucosaminidase 1 [Source:Jamboree;Acc:XB-GENE-987118]
ENSKETG00000007405	0.66533038	5741	dna5	T3-treatment		deafness, autosomal dominant 5 [Source:Jamboree;Acc:XB-GENE-983245]
ENSKETG00000007460	0.824158955	5331	xpnpep2	T3-treatment		X-prolyl aminopeptidase (aminopeptidase P) 2, membrane-bound [Source:Jamboree;Acc:XB-GENE-969249]
ENSKETG00000007575	0.591146631	411	hoxd13	T3-treatment		homeobox D13 [Source:Jamboree;Acc:XB-GENE-482320]
ENSKETG00000007594	0.734086198	5414	mrpl46	Control	EP	mitochondrial ribosomal protein L46 [Source:Jamboree;Acc:XB-GENE-970912]
ENSKETG00000007619	0.758878187	3691	plekhg1	T3-treatment		pleckstrin homology domain containing, family G (with RhoGef domain) member 1 [Source:Jamboree;Acc:XB-GENE-6050489]
ENSKETG00000007686	0.565087616	5536	fhod1	T3-treatment	EP	formin homology 2 domain containing 1 [Source:Jamboree;Acc:XB-GENE-948719]
ENSKETG00000007744	0.771914651	4809	tmem185a	Both		transmembrane protein 185A [Source:Jamboree;Acc:XB-GENE-972141]
ENSKETG00000007793	0.933356484	6151	abhd11	T3-treatment		abhydrolase domain containing 11 [Source:Jamboree;Acc:XB-GENE-952690]
ENSKETG00000007821	0.756808903	5741	anp32a	T3-treatment		acidic (leucine-rich) nuclear phosphoprotein 32 family, member A [Source:Jamboree;Acc:XB-GENE-982550]
ENSKETG00000007900	0.703378252	4306	slc25a48	T3-treatment		solute carrier family 25, member 48 [Source:Jamboree;Acc:XB-GENE-5770986]

ENSGT000000000000000000	0.695937	3281 hnf1b	T3-treatment		HNF1 homeobox B [Source:Jamboree;Acc:XB-GENE-485652]
ENSGT000000000000000032	0.742327166	6971 idh1	T3-treatment		isocitrate dehydrogenase 1 (NADP+), soluble [Source:Jamboree;Acc:XB-GENE-1004994]
ENSGT000000000000000065	0.62378625	3896 echdc2	T3-treatment		enoyl CoA hydratase domain containing 2 [Source:Jamboree;Acc:XB-GENE-948250]
ENSGT000000000000000090	1.344286445	5741 siah1	T3-treatment		seven in absentia homolog 1 [Source:Jamboree;Acc:XB-GENE-1014415]
ENSGT00000000000000132	0.905530231	4921 ankrd17	T3-treatment		ankyrin repeat domain 17 [Source:Jamboree;Acc:XB-GENE-994421]
ENSGT00000000000000281	0.680314796	3691 isoc1	T3-treatment		isochorismatase domain containing 1 [Source:Jamboree;Acc:XB-GENE-491284]
ENSGT000000000000008472	0.58478264	5741 cyct	T3-treatment		cytochrome c, testis [Source:Jamboree;Acc:XB-GENE-5931974]
ENSGT000000000000008628	0.60117618	4921 psmc6	T3-treatment		proteasome (prosome, macropain) 26S subunit, ATPase, 6 [Source:Jamboree;Acc:XB-GENE-978099]
ENSGT000000000000008843	1.306369732	5741 gpatch8	T3-treatment		G patch domain containing 8 [Source:Jamboree;Acc:XB-GENE-5789711]
ENSGT000000000000008880	1.25908231	5331 hook1	Both		hook homolog 1 [Source:Jamboree;Acc:XB-GENE-75863]
ENSGT000000000000008901	0.99212961	3486 ilai1	Both		interleukin 4 induced 1 [Source:Jamboree;Acc:XB-GENE-6037585]
ENSGT000000000000008903	1.117761716	5741 pum2	T3-treatment		pumilio homolog 2 [Source:Jamboree;Acc:XB-GENE-977105]
ENSGT000000000000008931	0.745656389	7381 cers2	T3-treatment		ceramide synthase 2 [Source:Jamboree;Acc:XB-GENE-852703]
ENSGT000000000000008956	0.691469657	5126 svap1	Control		synapse associated protein 1 [Source:Jamboree;Acc:XB-GENE-5952691]
ENSGT000000000000008968	0.874312543	4829 dtx2	T3-treatment		deltex homolog 2 [Source:Jamboree;Acc:XB-GENE-984000]
ENSGT000000000000009117	1.160053062	5946 bend7	T3-treatment	Non-EP	BEN domain containing 7 [Source:Jamboree;Acc:XB-GENE-6039598]
ENSGT000000000000009145	0.723849614	411 slc2a2	T3-treatment	Both EP & Non-EP	solute carrier family 2 (facilitated glucose transporter), member 2 [Source:Jamboree;Acc:XB-GENE-486462]
ENSGT000000000000009191	0.604202126	4921 trim63	T3-treatment		tripartite motif containing 63 [Source:Jamboree;Acc:XB-GENE-493173]
ENSGT000000000000009201	0.582050358	5331 plcd2	T3-treatment		phosphatidylinositol-specific phospholipase C, X domain containing 2 [Source:Jamboree;Acc:XB-GENE-5832516]
ENSGT000000000000009486	0.665686467	6561 smarc2	T3-treatment		SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily c, member 2 [Source:Jamboree;Acc:XB-GENE-490675]
ENSGT000000000000009635	1.33168876	5737 letmd1	Both		LETM1 domain containing 1 [Source:Jamboree;Acc:XB-GENE-962658]
ENSGT000000000000009655	0.939018446	5126 mettl1	T3-treatment		methyltransferase like 1 [Source:Jamboree;Acc:XB-GENE-1000662]
ENSGT000000000000009865	0.625909864	5331 vdac2	T3-treatment		voltage-dependent anion channel 2 [Source:Jamboree;Acc:XB-GENE-954839]
ENSGT000000000000009924	0.716819429	3760	Both		motile sperm domain containing 2 [Source:Jamboree;Acc:XB-GENE-957659]
ENSGT000000000000009990	0.619128514	411 mospd2	T3-treatment		SEC24 family, member D [Source:Jamboree;Acc:XB-GENE-1003364]
ENSGT000000000000010012	0.530005485	5741 sec24d	Control		brain and reproductive organ-expressed (TNFRSF1A modulator) [Source:Jamboree;Acc:XB-GENE-1032920]
ENSGT000000000000010201	1.341229632	6089 bre	T3-treatment		casein kinase 1, gamma 3 [Source:Jamboree;Acc:XB-GENE-479074]
ENSGT000000000000010259	0.570132543	5946 csnk1g3	T3-treatment		tumor necrosis factor receptor superfamily, member 10b [Source:Jamboree;Acc:XB-GENE-941760]
ENSGT000000000000010510	0.639871586	5741 tnfrsf10b	T3-treatment		Uncharacterized protein [Source:UniProtKB/TrEMBL;Acc:F6Y385]
ENSGT000000000000010654	0.594499198	821	Control		family with sequence similarity 63, member 8 [Source:Jamboree;Acc:XB-GENE-990463]
ENSGT000000000000010848	0.731851196	4716 fam63b	T3-treatment		interferon regulatory factor 2 binding protein-like [Source:Jamboree;Acc:XB-GENE-968642]
ENSGT000000000000010967	0.811321601	1026 irf2bp1	T3-treatment		H2A histone family, member Z [Source:Jamboree;Acc:XB-GENE-485054]
ENSGT000000000000011167	0.735032657	5536 h2afz	T3-treatment		eukaryotic translation initiation factor 2, subunit 1 alpha, 35kDa [Source:Jamboree;Acc:XB-GENE-989630]
ENSGT000000000000011221	0.608700504	3625 eif2s1	T3-treatment		OCIA domain containing 2 [Source:Jamboree;Acc:XB-GENE-966006]
ENSGT000000000000011674	0.600329882	6151 oclad2	T3-treatment	Non-EP	Uncharacterized protein [Source:UniProtKB/TrEMBL;Acc:F7CRX3]
ENSGT000000000000011730	0.650060742	3691	T3-treatment		cyclin J [Source:Jamboree;Acc:XB-GENE-485597]
ENSGT000000000000012186	0.749509734	4306 ccnj	T3-treatment	Both EP & Non-EP	MGC89226 protein [Source:Jamboree;Acc:XB-GENE-5804925]
ENSGT000000000000012208	1.124531048	3486 XB-GENE-5804925	T3-treatment		TP53 regulated inhibitor of apoptosis 1 [Source:Jamboree;Acc:XB-GENE-949263]
ENSGT000000000000012223	0.627756418	5946 triap1	T3-treatment		nuclear prelamin A recognition factor [Source:Jamboree;Acc:XB-GENE-972855]
ENSGT000000000000012236	0.600501662	7176 narf	T3-treatment		TCDD-inducible poly(ADP-ribose) polymerase [Source:Jamboree;Acc:XB-GENE-1000138]
ENSGT000000000000012260	0.583626499	6971 tiparp	T3-treatment		cyclin F [Source:Jamboree;Acc:XB-GENE-963729]
ENSGT000000000000012459	0.103600299	5126 ccnf	Both		H3 histone, family 3B (H3.3B) [Source:Jamboree;Acc:XB-GENE-488758]
ENSGT000000000000012575	0.696018317	4306 h3f3b	T3-treatment	EP	eukaryotic translation initiation factor 5 [Source:Jamboree;Acc:XB-GENE-957969]
ENSGT000000000000012766	0.730469393	3691 eif5	Both		MAP/microtubule affinity-regulating kinase 3 [Source:Jamboree;Acc:XB-GENE-867495]
ENSGT000000000000012767	0.704918463	5536 mark3	T3-treatment		forkhead box O6 [Source:Jamboree;Acc:XB-GENE-482993]
ENSGT000000000000012944	0.637362798	7381 foxo6	T3-treatment		UDP-glucose pyrophosphorylase 2 [Source:Jamboree;Acc:XB-GENE-974407]
ENSGT000000000000013007	0.5550004017	5536 upg2	T3-treatment		grancalcin, EF-hand calcium binding protein [Source:Jamboree;Acc:XB-GENE-983090]
ENSGT000000000000013175	0.564245737	1846 gca	T3-treatment	Non-EP	trk-fused gene [Source:Jamboree;Acc:XB-GENE-960556]
ENSGT000000000000013350	0.85759772	5832 tgf	T3-treatment	EP	phospholipase C, beta 2 [Source:Jamboree;Acc:XB-GENE-6045997]
ENSGT000000000000013371	0.631310053	7381 plc2b	T3-treatment		insulin induced gene 1 [Source:Jamboree;Acc:XB-GENE-487039]
ENSGT000000000000013492	1.530182345	411 insig1	T3-treatment		methyl-CpG binding domain protein 3 [Source:Jamboree;Acc:XB-GENE-491553]
ENSGT000000000000013593	1.041439305	6151 mbd3	Both		ornithine decarboxylase antizyme 1 [Source:Jamboree;Acc:XB-GENE-490737]
ENSGT000000000000013655	0.650751835	5331 oaz1	T3-treatment		DOT1-like, histone H3 methyltransferase [Source:Jamboree;Acc:XB-GENE-6033925]
ENSGT000000000000013658	0.920856055	4921 dot1l	Both	EP	carbonic anhydrase 2 [Source:Jamboree;Acc:XB-GENE-484348]
ENSGT000000000000013740	0.603216021	616 ca2	T3-treatment	Non-EP	cytokine induced apoptosis inhibitor 1 [Source:Jamboree;Acc:XB-GENE-998244]
ENSGT000000000000013788	0.553746754	4411 capin1	Control	Non-EP	
ENSGT000000000000013975	0.808084657	5126	Control		
ENSGT000000000000014257	0.60679815	7791 XB-GENE-5919586	T3-treatment	Both EP & Non-EP	hypothetical protein MGC75872 [Source:Jamboree;Acc:XB-GENE-5919586]
ENSGT000000000000014408	1.811057824	2256 sox4	Both		SRY (sex determining region Y)-box 4 [Source:Jamboree;Acc:XB-GENE-480727]
ENSGT000000000000014423	0.64384051	6766 stkl10	T3-treatment		serine/threonine kinase 10 [Source:Jamboree;Acc:XB-GENE-494456]
ENSGT000000000000014519	0.611593039	5536 brd1	Control		bromodomain containing 1 [Source:Jamboree;Acc:XB-GENE-949377]
ENSGT000000000000014527	0.550114424	5331 creld2	Control		cysteine-rich with EGF-like domains 2 [Source:Jamboree;Acc:XB-GENE-999014]
ENSGT000000000000014529	0.972788949	4716 pim3	Both		pim-3 oncogene [Source:Jamboree;Acc:XB-GENE-922022]
ENSGT000000000000014592	1.481857819	5126 runx1t1	T3-treatment		runt-related transcription factor 1, translocated to, 1 (cyclin D-related) [Source:Jamboree;Acc:XB-GENE-481238]
ENSGT000000000000014609	0.678706198	5331 decr1	Both		2,4-dienoyl CoA reductase 1, mitochondrial [Source:Jamboree;Acc:XB-GENE-985109]
ENSGT000000000000014629	1.3928504	5384 pgpep1	Both		pyroglutamyl-peptidase I [Source:Jamboree;Acc:XB-GENE-961493]
ENSGT000000000000014644	0.655770768	5331 sptlc1	T3-treatment		serine palmitoyltransferase, long chain base subunit 1 [Source:Jamboree;Acc:XB-GENE-1004880]
ENSGT000000000000014689	0.7224093	6077 tmem67	Control		transmembrane protein 67 [Source:Jamboree;Acc:XB-GENE-985149]
ENSGT000000000000014834	0.572675509	411 ptch1	T3-treatment		patched 1 [Source:Jamboree;Acc:XB-GENE-488222]
ENSGT000000000000014839	0.799269986	616 cdc14b	T3-treatment		CDC14 cell division cycle 14 homolog B [Source:Jamboree;Acc:XB-GENE-977314]
ENSGT000000000000014847	0.613151447	5331 foxo3	T3-treatment	EP	forkhead box O3 [Source:Jamboree;Acc:XB-GENE-945072]
ENSGT000000000000014909	0.749529803	1846 arhgap18	T3-treatment		Rho GTPase activating protein 18 [Source:Jamboree;Acc:XB-GENE-988160]
ENSGT000000000000014950	1.114596467	411 ccdc136	Both		coiled-coil domain containing 136 [Source:Jamboree;Acc:XB-GENE-5992991]
ENSGT000000000000015209	0.772280825	1231 sema4g	T3-treatment		sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4G [Source:Jamboree;Acc:XB-GENE-856594]

ENSGT00000015656	0.800730025	1231 igfbp1	T3-treatment	EP	insulin-like growth factor binding protein 1 [Source:Jamboree;Acc:XB-GENE-485497]
ENSGT00000015706	0.588024608	7381 ntm	T3-treatment		neurotrinin [Source:Jamboree;Acc:XB-GENE-6045425]
ENSGT00000015712	0.889180751	3175 rab12b	Both	Both EP & Non-EP	RAB, member of RAS oncogene family-like 2B [Source:Jamboree;Acc:XB-GENE-979695]
ENSGT00000015829	1.28411779	1641	T3-treatment		Uncharacterized protein [Source:UniProtKB/TrEMBL;Acc:F6UG11]
ENSGT00000015930	1.271505402	1382	Both		
ENSGT00000015978	0.631119961	7381 ski	T3-treatment	EP	v-ski sarcoma viral oncogene homolog [Source:Jamboree;Acc:XB-GENE-494028]
ENSGT00000016078	0.653338311	4716 ivd	T3-treatment		isovaleryl-CoA dehydrogenase [Source:Jamboree;Acc:XB-GENE-1008677]
ENSGT00000016109	0.556918001	3691 gatm	Control		glycine amidinotransferase (L-arginine:glycine amidinotransferase) [Source:Jamboree;Acc:XB-GENE-974514]
ENSGT00000016147	0.793758254	5946 mtfp1	T3-treatment		mitochondrial fission process 1 [Source:Jamboree;Acc:XB-GENE-1001678]
ENSGT00000016154	0.689053412	3691 inpp5j	T3-treatment		inositol polyphosphate-5-phosphatase 1 [Source:Jamboree;Acc:XB-GENE-984978]
ENSGT00000016179	1.220125515	7421 trpm1	Both		transient receptor potential cation channel, subfamily M, member 1 [Source:Jamboree;Acc:XB-GENE-492528]
ENSGT00000016685	0.962987792	821 hps5	T3-treatment		Hermansky-Pudlak syndrome 5 [Source:Jamboree;Acc:XB-GENE-5931110]
ENSGT00000016797	0.866475033	2461	Both		
ENSGT00000016807	0.797017854	2666 apgap6	T3-treatment		
ENSGT00000016952	0.644598744	5536 ppm1a	T3-treatment		
ENSGT00000017065	0.667299542	5741 mhca1a	T3-treatment		1-acylglycerol-3-phosphate O-acyltransferase 6 (lysophosphatidic acid acyltransferase, zeta) [Source:Jamboree;Acc:XB-GENE-999686]
ENSGT00000017129	0.942478566	4175 c18orf45	Both		protein phosphatase, Mg <sup>2+</sup> /Mn <sup>2+</sup> -dependent, 1A [Source:Jamboree;Acc:XB-GENE-852654]
ENSGT00000017326	1.896790901	5741 MGCI08117	T3-treatment		major histocompatibility complex class I antigen [Source:Jamboree;Acc:XB-GENE-485307]
ENSGT00000017395	1.480446922	5536 spag7	Both		chromosome 18 open reading frame 45 [Source:Jamboree;Acc:XB-GENE-971853]
ENSGT00000017490	0.638835057	411 kiaa0196	T3-treatment		MGCI08117 protein precursor [Source:RefSeq peptide;Acc:NP_001015694]
ENSGT00000017504	0.620592715	5126 nrg1	T3-treatment		sperm associated antigen 7 [Source:Jamboree;Acc:XB-GENE-1010187]
ENSGT00000017537	0.703813304	5389 c14orf119	T3-treatment	Non-EP	KIAO196 [Source:Jamboree;Acc:XB-GENE-5781989]
ENSGT00000017716	0.927070124	4306 mrps30	Control		neuregulin 1 [Source:Jamboree;Acc:XB-GENE-1011451]
ENSGT00000017731	0.644800655	5536 pxex1a	T3-treatment		chromosome 14 open reading frame 119 [Source:Jamboree;Acc:XB-GENE-996611]
ENSGT00000017801	0.857261504	6356 efnb2	T3-treatment	Both EP & Non-EP	mitochondrial ribosomal protein S30 [Source:Jamboree;Acc:XB-GENE-964476]
ENSGT00000017860	1.114659799	5741 mtmr14	T3-treatment		peroxisomal biogenesis factor 11 alpha [Source:Jamboree;Acc:XB-GENE-970930]
ENSGT00000018211	0.627636343	6971 atad2b	T3-treatment		ephrin-B2 [Source:Jamboree;Acc:XB-GENE-488606]
ENSGT00000018264	0.632917429	5741	Both		myotubularin related protein 14 [Source:Jamboree;Acc:XB-GENE-5755863]
ENSGT00000018291	0.610825523	5536 cebpa	T3-treatment		
ENSGT00000018408	0.740624328	5946	T3-treatment		UBX domain protein 2A [Source:Jamboree;Acc:XB-GENE-972873]
ENSGT00000018542	0.565515144	2051	Control		ATPase family, AAA domain containing 2B [Source:Jamboree;Acc:XB-GENE-5956276]
ENSGT00000018642	0.694506305	4306 pias3	T3-treatment		CCAAT/enhancer binding protein (C/EBP), alpha [Source:Jamboree;Acc:XB-GENE-853397]
ENSGT00000018646	0.576030792	2871 SH3RF3	Control		
ENSGT00000018904	0.59082058	3691 mtrf1	T3-treatment		protein inhibitor of activated STAT, 3 [Source:Jamboree;Acc:XB-GENE-486632]
ENSGT00000019051	0.85590678	411 kif9	Both	Both EP & Non-EP	SH3 domain containing ring finger 3 [Source:HGNC Symbol;Acc:HGNC:24699]
ENSGT00000019217	0.651820172	5741 pdlim5	T3-treatment	Non-EP	mitochondrial translational release factor 1 [Source:Jamboree;Acc:XB-GENE-991014]
ENSGT00000019242	0.835662324	5536 gmppa	T3-treatment		Kruppel-like factor 9 [Source:Jamboree;Acc:XB-GENE-483889]
ENSGT00000019384	0.529587697	4921 ncbp2	Control		PDZ and LIM domain 5 [Source:Jamboree;Acc:XB-GENE-854114]
ENSGT00000019410	0.66718963	5946 pafah1b1	T3-treatment		GDP-mannose pyrophosphorylase A [Source:Jamboree;Acc:XB-GENE-984239]
ENSGT00000019456	0.891376579	6151 slc32a2	T3-treatment	EP	nuclear cap binding protein subunit 2, 20kDa [Source:Jamboree;Acc:XB-GENE-1005786]
ENSGT00000019718	0.715213607	6151 cted4	T3-treatment		platelet-activating factor acetylhydrolase 1b, regulatory subunit 1 (45kDa) [Source:Jamboree;Acc:XB-GENE-1002843]
ENSGT00000019748	1.086067038	2871 vgl1	T3-treatment		solute carrier family 3 (activators of dibasic and neutral amino acid transport), member 2 [Source:Jamboree;Acc:XB-GENE-1002945]
ENSGT00000020010	0.570222979	3281 dchr24	T3-treatment		Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 4 [Source:Jamboree;Acc:XB-GENE-946639]
ENSGT00000020076	0.619781455	3486 tmem130	T3-treatment		vestigial like 1 [Source:Jamboree;Acc:XB-GENE-982100]
ENSGT000000202416	1.0272873	5331 rxrb	Both		24-dehydrocholesterol reductase [Source:Jamboree;Acc:XB-GENE-979905]
ENSGT00000020432	0.613240462	2763	T3-treatment		transmembrane protein 130 [Source:Jamboree;Acc:XB-GENE-6462848]
ENSGT00000020486	0.637445582	3896 celf4	T3-treatment		retinoid X receptor, beta [Source:Jamboree;Acc:XB-GENE-480167]
ENSGT00000020685	0.646003054	1436 pcca	T3-treatment	EP	Uncharacterized protein [Source:UniProtKB/TrEMBL;Acc:F7CIZ2]
ENSGT00000020739	0.609564924	1846 MYO5C	T3-treatment	Non-EP	CUGBP, Elav-like family member 4 [Source:Jamboree;Acc:XB-GENE-5873699]
ENSGT00000020930	1.00581806	5536 aldh2	T3-treatment	Non-EP	propionyl CoA carboxylase, alpha polypeptide [Source:Jamboree;Acc:XB-GENE-944987]
ENSGT00000021046	0.84551864	3281 vmo1	Both		myosin VC [Source:HGNC Symbol;Acc:HGNC:7604]
ENSGT00000021098	0.532670829	5331 agxt2l1	Control	Non-EP	aldehyde dehydrogenase 2 family (mitochondrial) [Source:Jamboree;Acc:XB-GENE-490836]
ENSGT00000021543	0.560399198	3477	Both		vitelline membrane outer layer 1 homolog (chicken) [Source:Jamboree;Acc:XB-GENE-994821]
ENSGT00000021645	0.735016425	2461 hal.2	T3-treatment		alanine-glyoxylate aminotransferase 2-like 1 [Source:Jamboree;Acc:XB-GENE-968831]
ENSGT00000021760	0.628976111	5536 capza2	T3-treatment		
ENSGT00000021871	0.575378286	5946 dusp6	T3-treatment		histidine ammonia-lyase, gene 2 [Source:Jamboree;Acc:XB-GENE-1009089]
ENSGT00000022090	0.697071809	821	Both		capping protein (actin filament) muscle Z-line, alpha 2 [Source:Jamboree;Acc:XB-GENE-489168]
ENSGT00000022091	1.008327759	3795	Both		dual specificity phosphatase 6 [Source:Jamboree;Acc:XB-GENE-978216]
ENSGT00000022103	1.295138632	6151	Both		
ENSGT00000022107	1.137341698	4716	Both		
ENSGT00000022222	0.636533218	4921 etfb	T3-treatment		electron-transfer-flavoprotein, beta polypeptide [Source:Jamboree;Acc:XB-GENE-956098]
ENSGT00000022360	1.091474998	4101 slc2a11	Both		solute carrier family 2 (facilitated glucose transporter), member 11 [Source:Jamboree;Acc:XB-GENE-980809]
ENSGT00000022389	0.656413192	5331 slc25a1	T3-treatment	EP	solute carrier family 25 (mitochondrial carrier; citrate transporter), member 1 [Source:Jamboree;Acc:XB-GENE-491686]
ENSGT00000022397	0.782153419	4921	T3-treatment		
ENSGT00000022525	0.607636699	3076 dll1	T3-treatment		delta-like 1 [Source:Jamboree;Acc:XB-GENE-479210]
ENSGT00000022643	1.328316594	4716 clorf55	T3-treatment		chromosome 1 open reading frame 55 [Source:Jamboree;Acc:XB-GENE-5807809]
ENSGT00000022909	0.827619088	1641 kiaa0232	T3-treatment		KIAA0232 [Source:Jamboree;Acc:XB-GENE-5888041]
ENSGT00000023023	0.793135237	616	Both		X-ray repair complementing defective repair in Chinese hamster cells 3 [Source:Jamboree;Acc:XB-GENE-1016741]
ENSGT00000023061	0.646104839	616 xrcc3	T3-treatment		peptidase (mitochondrial processing) beta [Source:Jamboree;Acc:XB-GENE-999999]
ENSGT00000023106	0.635464958	6356 pmpcb	T3-treatment		immediate early response 5 [Source:Jamboree;Acc:XB-GENE-1004819]
ENSGT00000023129	0.886038003	5126 ier5	Both	EP	ubiquitin A-52 residue ribosomal protein fusion product 1 [Source:Jamboree;Acc:XB-GENE-939925]
ENSGT00000023202	0.800996233	1641 uba52	T3-treatment		

ENSXETG00000023220	0.6116615	5126	T3-treatment	uncharacterized protein LOC100145115 [Source:RefSeq peptide;Acc:NP_001120099]
ENSXETG00000023263	1.881293469	7791	cops5	COP9 constitutive photomorphogenic homolog subunit 5 [Source:Jamboree;Acc:XB-GENE-952827]
ENSXETG00000023333	0.530257177	3076	galnt2	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 2 [GalNAc-T2] [Source:Jamboree;Acc:XB-GENE-980077]
ENSXETG00000023400	0.573849381	5741	sdha	succinate dehydrogenase complex, subunit A, flavoprotein (Fp) [Source:Jamboree;Acc:XB-GENE-956942]
ENSXETG00000023564	0.720251162	3896	cdnp1	carnosine dipeptidase 1 (metalloendopeptidase M20 family) [Source:Jamboree;Acc:XB-GENE-969925]
ENSXETG00000023610	0.636469317	2256	ghsr	growth hormone secretagogue receptor [Source:Jamboree;Acc:XB-GENE-484475]
ENSXETG00000023684	0.724746129	6766	znf827	zinc finger protein 827 [Source:Jamboree;Acc:XB-GENE-1033048]
ENSXETG00000024399	0.900943407	7176	THRA	thyroid hormone receptor, alpha [Source:RefSeq peptide;Acc:NP_001039261]
ENSXETG00000024449	0.921639937	4558	ppp1r11	protein phosphatase 1, regulatory (inhibitor) subunit 11 [Source:Jamboree;Acc:XB-GENE-999517]
ENSXETG00000024800	0.760240323	5946	ppp1cc	protein phosphatase 1, catalytic subunit, gamma isozyme [Source:Jamboree;Acc:XB-GENE-967934]
ENSXETG00000024496	1.026685959	7791	XB-GENE-5810927	hypothetical protein LOC100036876 [Source:Jamboree;Acc:XB-GENE-5810927]
ENSXETG00000024500	1.437572526	1231	slc25a23	solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 23 [Source:Jamboree;Acc:XB-GENE-5998763]
ENSXETG00000024677	0.590187609	5331	ndufa3	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 3, 9kDa [Source:Jamboree;Acc:XB-GENE-1006323]
ENSXETG00000024680	0.599198102	616		T3-treatment
ENSXETG00000024770	0.556932815	5331		Control
ENSXETG00000024837	0.605949449	493		T3-treatment
ENSXETG00000024875	1.05854878	2666	c7orf11	Both
ENSXETG00000024911	0.943846094	7586	tgfa	T3-treatment
ENSXETG00000024974	0.957426537	1210		T3-treatment
ENSXETG00000024985	0.715945289	5741	c19orf63	T3-treatment
ENSXETG00000024993	0.678463782	4101		Both
ENSXETG00000024995	0.741665796	7060		Both
ENSXETG00000024996	0.945756821	1641		Both
ENSXETG00000025000	0.636735799	654		Both
ENSXETG00000025001	0.899952944	5856		Both
ENSXETG00000025007	0.178542023	5331	n4bp1	T3-treatment
ENSXETG00000025098	0.571774656	4101		T3-treatment
ENSXETG00000025099	0.820160785	6971	hmgn1	T3-treatment
ENSXETG00000025179	0.630923531	821		Control
ENSXETG00000025214	0.698840157	411	bnp13	T3-treatment
ENSXETG00000025290	1.034717537	5050	brp44l	Both
ENSXETG00000026175	0.59423579	5536	timm23	T3-treatment
ENSXETG00000026398	0.675752127	2256		T3-treatment
ENSXETG00000026537	1.028306728	3486	gadd45g	Both
ENSXETG00000026573	0.653136807	2461		Both
ENSXETG00000026585	0.673202298	5331	nudt4	T3-treatment
ENSXETG00000026613	0.551876403	411		T3-treatment
ENSXETG00000027016	0.591082662	4410		T3-treatment
ENSXETG00000027093	0.920425549	6356		T3-treatment
ENSXETG00000027097	0.684404515	4921	arpp19	T3-treatment
ENSXETG00000027128	0.563404735	1231	uqrq	T3-treatment
ENSXETG00000027133	0.676628105	616		T3-treatment
ENSXETG00000027149	0.627618807	411		T3-treatment
ENSXETG00000027207	0.730305533	5126	ufm1	T3-treatment
ENSXETG00000027282	0.770005625	1436	f1vc2	T3-treatment
ENSXETG00000027459	0.694000653	6151	c7orf23	Both
ENSXETG00000027482	0.883129104	1026	fbx06	T3-treatment
ENSXETG00000027534	0.624596395	4101	hoxa4	T3-treatment
ENSXETG00000027622	0.844216923	3896	ihd2	T3-treatment
ENSXETG00000027641	0.573501577	5331	actg1	T3-treatment
ENSXETG00000027647	1.015082736	3076		T3-treatment
ENSXETG00000027849	0.606264265	581	HIST2H2AB	T3-treatment
ENSXETG00000027887	1.079704572	5741	trib2	T3-treatment
ENSXETG00000028367	0.759261007	6633		Control
ENSXETG00000028378	0.713175656	4170		T3-treatment
ENSXETG00000028374	0.635904988	2382	U2	Control
ENSXETG000000288912	0.709631379	3924		Control
ENSXETG00000028917	0.602152831	206	xtr-mir-200a	T3-treatment
ENSXETG00000029004	0.693566044	3508	xtr-mir-19b-1	T3-treatment
ENSXETG00000029218	0.633203875	616		T3-treatment

\*Based on the published information by Sun et al. (2013), Expression profiling of intestinal tissues implicates novel genes and pathways essential for adult stem cell development. Endocrinology 154 (11), 4396–4407. Note that the regulation of most of the genes, are unknown as they were not found on the microarray used by Sun et al. (2013), likely due to the use of different *same names* on the microarray vs. genomic chip; EE, epithelium; gE, gut epithelium; gE-E, the rest of the intestine.